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=> d que 138
L3          3455 SEA FILE=HCAPLUS ABB=ON  PLU=ON  5-HT ANTAGONISTS+OLD,NT/CT
L4          2554 SEA FILE=HCAPLUS ABB=ON  PLU=ON  5-HT AGONISTS+OLD,NT/CT
L6         36250 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3 OR L4 OR 5-HT OR SEROTONERG
                 IC
L31         1510 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6 AND (?NUCLEOTID? OR DNA OR
                 RNA )
L32          171 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L31 AND SCREEN?
L34          161 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L32 AND RECEP?
L36          108 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L34 AND CELL?
L38           90 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36 AND TRANS?

=> d 138 ibib ab 1-90

L38  ANSWER 1 OF 90  HCAPLUS  COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:         2003:837414  HCAPLUS
DOCUMENT NUMBER:          139:333083
TITLE:                    Method of identifying transmembrane
                          protein-interacting compounds
INVENTOR(S):              O'Dowd, Brian F.; George, Susan R.
PATENT ASSIGNEE(S):       Can.
SOURCE:                   PCT Int. Appl., 108 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND  DATE          APPLICATION NO.   DATE
     ----------------    ----  --------      ----------------  --------
     WO 2003087836        A1   20031023      WO 2003-CA542     20030411
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
             GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:                  US 2002-371704P   P  20020412
                                        US 2002-379419P   P  20020513
                                        US 2002-387570P   P  20020612
                                        US 2002-422891P   P  20021101
                                        US 2003-442556P   P  20030127
AB   The invention provides a method for screening a candidate compd.
     for its ability to interact with at least one transmembrane
     protein comprising: transfecting a cell with at least
     one nucleotide sequence encoding a protein comprising a
     transmembrane protein contg. at least one nuclear localization
     sequence (NLS) and a detectable moiety and permitting expression of the
     encoded protein in the cell; contacting the cell with
     a candidate compd.; and detg. the distribution of the expressed protein in
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the **cell** by detecting the distribution of the detectable moiety in the **cell**; wherein detection of an altered distribution of the detectable moiety in the **cell** relative to the distribution of the detectable moiety in a control **cell** not contacted with the candidate compd. indicates that the compd. interacts with the **transmembrane** protein. The invention provides a method for detg. whether a first protein and a second protein are able to oligomerize comprising: **transfecting** a **cell** with a first **nucleotide** sequence encoding a first protein contg. an NLS and a second **nucleotide** sequence encoding a second protein comprising a detectable moiety and permitting expression of the encoded first and second proteins in the **cell**; and detg. the distribution of the detectable moiety in the **cell**; wherein detection of the detectable moiety in or adjacent to the nucleus of the **cell** or detection of a reduced level of the detectable moiety at the **cell** surface, relative to a control **cell**, indicates that the first and second proteins interact. **Transmembrane** proteins have been classified in several major classes, including G protein coupled **receptors**, **transporters**, tyrosine kinase **receptors**, cytokine **receptors** and LDL **receptors**

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 2 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:696523 HCAPLUS
DOCUMENT NUMBER: 139:229271
TITLE: Signature genes expressed the lung during asthma or allergies and their use in predicting, diagnosing and treating asthma or allergies
INVENTOR(S): Rothenberg, Marc Elliot; Zimmermann, Nives
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 36 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003166562	A1	20030904	US 2003-377998	20030228
WO 2003073990	A2	20030912	WO 2003-US6183	20030228

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-361606P P 20020301

AB Several genes are upregulated in the lung of asthma or allergy sufferers. Many of the genes up-regulated in asthma are involved in arginine metab.

in the lung. Moreover, a set of 291 signature genes was found that can be used to indicate a patient's predilection for developing asthma or the patient's degree of suffering. Also, a set of 59 signature genes were found that indicate a patient's predilection for developing allergies. Many of the up-regulated genes relating to asthma were from the arginine metabolic pathway. Other genes, such as ADAM8, SPRR2A and SPRR2B were also strongly up-regulated in asthma. Treatment of asthma may be accomplished by administering compns. which decrease the levels of Arginase I, Arginase II, cationic amino acid **transporter** CAT2, or other arginase pathway members in the lung. Addnl., detection of altered levels of these proteins or the mRNA encoding them may be useful to diagnose the presence of asthma in a patient.

L38 ANSWER 3 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:678934 HCAPLUS
DOCUMENT NUMBER: 139:212903
TITLE: Treatment, prognosis and diagnosis of AIDS and HIV-related disorders and drug **screening** using differentially expressed genes and proteins
INVENTOR(S): Powell, Douglas M.; Weich, Nadine S.
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 167 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003070883	A2	20030828	WO 2003-US4246	20030213
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003216288	A1	20031120	US 2003-366288	20030213

PRIORITY APPLN. INFO.:
US 2002-357391P P 20020215
US 2002-380249P P 20020513
US 2002-391306P P 20020625
US 2002-406297P P 20020827
US 2002-412007P P 20020919
US 2002-417508P P 20021010
US 2002-432318P P 20021210

AB The present invention relates to methods for diagnosis and treatment of AIDS or an HIV-related disorder or disorders. Specifically, the present invention identifies the differential expression of 1414, 1481, 1553, 34021, 1720, 1683, 1552, 1682, 1675, 12825, 9952, 5816, 10002, 1611, 1371, 14324, 126, 270, 312, 167, 326, 18926, 6747, 1793, 1784, and 2045 genes in tissues relating to AIDS or an HIV-related disorder, relative to their expression in normal, or non-AIDS or HIV-related disease states, and/or in

response to manipulations relevant to AIDS or an HIV-related disorder. The present invention describes methods for the diagnostic evaluation and prognosis of various HIV-related disorders, and for the identification of subjects exhibiting a predisposition to such conditions. The invention also provides methods for identifying a compd. capable of modulating AIDS or an HIV-related disorder or disorders. The present invention also provides methods for the identification and therapeutic use of compds. as treatments of AIDS or an HIV-related disorder. The therapeutic compds. include small mols., peptides, antibodies, ribozymes and antisense **oligonucleotides**.

L38 ANSWER 4 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:633897 HCAPLUS
DOCUMENT NUMBER: 139:178697
TITLE: **Screening** of human monoclonal antibodies against **cell** surface coreceptor of HIV for diagnosis and therapy
INVENTOR(S): Hua, Shaobing; Pauling, Michelle H.; Zhu, Li
PATENT ASSIGNEE(S): Genetastix Corporation, USA
SOURCE: PCT Int. Appl., 150 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003066830	A2	20030814	WO 2003-US3763	20030207
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003165988	A1	20030904	US 2002-71866	20020208

PRIORITY APPLN. INFO.: US 2002-71866 A1 20020208
US 2002-133978 A1 20020425

AB Methods are provided for efficient, high throughput **screening** of antibody libraries against protein targets, esp. membrane proteins. In particular, methods are provided for **screening** a fully human antibody library against membrane proteins such as chemokine **receptors** in yeast. More particularly, a library of human single chain antibodies is **screened** against peptide fragments derived from extracellular domains of human CXCR4 and CCR5 resp. and high affinity monoclonal antibodies against CXCR4 and CCR5 are selected. The antibodies can be used as prophylactics or therapeutics to prevent and treat HIV infection, cancer and other diseases or conditions, as well as for **screening** drugs and diagnosing diseases or conditions assocd. with interactions with membrane proteins.

L38 ANSWER 5 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:633347 HCAPLUS
DOCUMENT NUMBER: 139:173767

TITLE: Pharmacological compound **screening** method using nematode worms
INVENTOR(S): Verwaerde, Philippe; Bogaert, Thierry; Platteeuw, Christ; Cuvillier, Gwladys; Behgyn, Myriam; Feichtinger, Richard
PATENT ASSIGNEE(S): Devgen, N.V., Belg.
SOURCE: U.S. Pat. Appl. Publ., 54 pp., Cont.-in-part of U.S. Ser. No. 550,107.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003154501	A1	20030814	US 2002-214445	20020807
GB 2358399	A1	20010725	GB 2001-9262	20000414
GB 2358399	B2	20020116		
GB 2358400	A1	20010725	GB 2001-9263	20000414
GB 2358400	B2	20020116		
GB 2359358	A1	20010822	GB 2001-11712	20000414
GB 2359358	B2	20020327		
GB 2359359	A1	20010822	GB 2001-11713	20000414
GB 2359359	B2	20020123		
GB 2359360	A1	20010822	GB 2001-11783	20000414
GB 2359360	B2	20020116		
GB 2359361	A1	20010822	GB 2001-11787	20000414
GB 2359361	B2	20020116		
GB 2359626	A1	20010829	GB 2001-11714	20000414
GB 2359626	B2	20020501		
GB 2359627	A1	20010829	GB 2001-11778	20000414
GB 2359627	B2	20020123		
US 2003149995	A1	20030807	US 2003-371101	20030221

PRIORITY APPLN. INFO.:

GB 1999-8670	A	19990415
GB 1999-8677	A	19990415
US 1999-129596P	P	19990415
US 2000-549411	A2	20000414
US 2000-550107	A2	20000414
GB 1999-12736	A	19990601
GB 2000-9358	A3	20000414
GB 2000-9360	A3	20000414
US 2000-549872	A3	20000414

AB The invention provides methods for **screening** of chem. substances with potential pharmacol. activity using nematode worms, e.g. Caenorhabditis elegans. Specifically, the invention provides methods adapted for high-throughput **screening** which are performed in a multi-well plate format.

L38 ANSWER 6 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:532691 HCAPLUS
DOCUMENT NUMBER: 139:95435
TITLE: Modified **receptors** on **cell** membranes for the discovery of therapeutic ligands
INVENTOR(S): Schwartz, Thue W.; Martini, Lene; Heydorn, Arne; Jorgensen, Rasmus
PATENT ASSIGNEE(S): 7TM Pharma A/S, Den.

SOURCE: PCT Int. Appl., 122 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003055914	A2	20030710	WO 2002-DK900	20021220
WO 2003055914	A3	20031023		

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

DK 2001-1944	A	20011221
DK 2002-113	A	20020122
DK 2002-1043	A	20020703
US 2002-394122P	P	20020703

AB A drug discovery method is provided for selecting a compd. selected from the group consisting of a small org. substance, a biopharmaceutical, or an antibody or part thereof. The method comprises the steps of (i) expressing one or more **receptors** on a **cell** membrane, such as, e.g., an exterior **cell** surface of a **cell**, (ii) contacting one or more expressed **receptors** with a test compd. or a selection of test compds. (libraries), and (iii) selecting one or more compds. based on its ability to bind one or more **receptors** . The step of expressing the one or more **receptors** comprises capturing one or more **receptors** on the exterior **cell** surface in a conformation that predominantly enables binding or interaction with a ligand, and the conformation that predominantly enables binding or interaction with a ligand is provided by modification of one or more **receptors** by a method comprising at least one of the following: (a) fusion with any protein which keeps the **receptor** in the desired conformation such as, e.g. an arrestin, a modified arrestin, a G-protein or a modified G-protein, (b) site-directed mutagenesis, and (c) deletion. The **receptors** may be captured on the exterior **cell** surface by at least one of the following: (d) interaction of the **receptor** with a scaffolding protein, optionally, with a scaffolding protein network and (e) means for blocking **receptor** internalization, e.g. by co-expression of a mutated dynamin or a modified arrestin or by use of chems. such as, e.g., sucrose and/or Tris. Thus, by coexpressing of either the wild-type **receptor** or by modifying the **receptor** by engineering for example a recognition motif for a strong binder into its structure (for example, a PDZ recognition motif at its C-terminal end), and coexpression of this with a scaffolding protein such as PSD-95 or a modified scaffolding protein which interacts with the cytoskeleton at the **cell** surface or is made to be closely assocd. with the membrane through a lipid anchor, a high level of surface expression can be ensured,

which will benefit its use in the drug discovery process. As a result of the strong tendency of the scaffolding proteins to interact with each other, just the cotransfection with one or more appropriate scaffolding proteins or modified scaffolding protein may also lead to the formation of patches with high local concns of the **receptor** or modified **receptor**, which will be highly beneficial in the drug discovery process where they are used initially to select binding mols. The method is exemplified by expression of the NK1 **receptor** in an agonist high-affinity binding form at the surface of **transfected cells** through fusion with arrestin or the N-terminal fragment of arrestin.

L38 ANSWER 7 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:435383 HCAPLUS
DOCUMENT NUMBER: 139:18342
TITLE: Collections of **transgenic** animal lines with subsets of **cells** characterized by expression of an endogenous marker gene and uses
INVENTOR(S): Serafini, Tito Andrew
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 77 pp., Cont.-in-part of U.S. Ser. No. 783,487.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003106074	A1	20030605	US 2002-77025	20020214
US 2003051266	A1	20030313	US 2001-783487	20010214

PRIORITY APPLN. INFO.: US 2001-783487 A2 20010214
AB Collections of **transgenic** animals in which a **transforming** expression cassette is integrated, either at random or by homologous recombination, in a no. of sites across the genome are described. The animals are **transformed** with a dicistronic expression cassette that includes a marker gene that can be used to characterize the animal and a selectable or **screenable** marker such as an antibiotic resistance. The two genes are coexpressed, e.g. by using a single promoter and an internal ribosome entry site. Such **transgenic** animals can then be used to detect, isolate and/or select pure populations of **cells** having a particular functional characteristic. The isolated **cells** have uses in gene discovery, target identification and validation, genomic and proteomic anal., etc.

L38 ANSWER 8 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:411627 HCAPLUS
DOCUMENT NUMBER: 139:207901
TITLE: Development of a high-throughput bioassay to **screen** melatonin **receptor** agonists using human melatonin **receptor** expressing CHO **cells**
AUTHOR(S): Yokoyama, Tetsuo; Kato, Nobumasa; Yamada, Naoto
CORPORATE SOURCE: Research and Development Division , Research Center, Pharmaceutical Science, JCR Pharmaceuticals Co., Ltd., Nishi-ku, Kobe, 651-2241, Japan

SOURCE: Neuroscience Letters (2003), 344(1), 45-48
CODEN: NELED5; ISSN: 0304-3940
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Melatonin **receptors** belong to the superfamily of G-protein-coupled **receptors** and appear to couple with Gi type of G protein, which has an inhibitory effect on the adenylate cyclase. Normally, melatonin dose not induce **transient** elevation of intracellular calcium concn. in CHO **cells** stably expressing melatonin **receptors**. Accordingly, the **cells** are unable to be used for fluorescent imaging plate reader (FLIPR), which is the device used to measure the **cellular** signal as a calcium elevation. To overcome this issue the authors tried to **transfect** chimeric G protein, Gqi5, into CHO **cells** expressing melatonin **receptors**. The Gqi5 is a chimeric Gq protein contg. the five C-terminal amino acids from Gi, which interact with Gi-coupled **receptor** and possess the function of evaluating calcium concn. through the Gq pathway. The **transfected cells** result in a calcium elevation in a concn.-response manner. The specificity of this assay was similar to that of radioreceptor binding assay. Therefore, this FLIPR assay, using melatonin **receptor** and Gqi5 expressing CHO **cells**, is available for clin. bioassay of melatonin and for the **screening** of specific ligands of melatonin.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 9 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:373885 HCAPLUS
DOCUMENT NUMBER: 138:362622
TITLE: Functional assay for agonist activation of neuroreceptors
INVENTOR(S): Shrikhande, Alka Vinay; Wong, Stephen Kwok-Fung
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: Eur. Pat. Appl., 14 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1310800	A2	20030514	EP 2002-257707	20021106
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
WO 2003040303	A2	20030515	WO 2002-IB4557	20021030
WO 2003040303	A3	20031009		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,				

PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003104489	A1	20030605	US 2002-289818	20021107
JP 2003194810	A2	20030709	JP 2002-325137	20021108

PRIORITY APPLN. INFO.: US 2001-344755P P 20011109

AB The invention provides a novel high throughput functional assay for certain agonist-activated **receptors**, including Alpha 1A, Alpha 2A, H1, 5HT1A, 5HT2A, D2 and D3 **receptors**. The assay method of the invention uses an elevated temp. and a **cell** line that stably expresses both the **receptor** and the promiscuous G protein G.alpha.15 wherein agonist-induced intracellular Ca2+ release was monitored by a Fluorometric Imaging Plate Reader (FLIPR). The magnitude of the agonist-induced response was dramatically enhanced by performing the assay at an elevated temp., rather than at room temp. The novel assay of the invention is useful for selecting compds. which are effective in the treatment of disorders related to the activation of certain neuroreceptors.

L38 ANSWER 10 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:330923 HCAPLUS
DOCUMENT NUMBER: 138:333433
TITLE: Constitutively activated forms of human G protein-coupled **receptors** with substitution of a conserved region in **transmembrane** domain 6 and their use in drug **screening**
INVENTOR(S): Liaw, Chen W.; Behan, Dominic P.; Chalmers, Derek T.
PATENT ASSIGNEE(S): Arena Pharmaceuticals, Inc., USA
SOURCE: U.S., 221 pp., Cont.-in-part of U.S. Ser. No. 60,188. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 16
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6555339	B1	20030429	US 1998-170496	19981013
AU 9962991	A1	20000501	AU 1999-62991	19990112
CA 2342314	AA	20000420	CA 1999-2342314	19991012
WO 2000021987	A2	20000420	WO 1999-US23935	19991012
WO 2000021987	A3	20000713		
W: JP				
WO 2000022129	A1	20000420	WO 1999-US23938	19991012
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9964307	A1	20000501	AU 1999-64307	19991012
EP 1121431	A1	20010808	EP 1999-951991	19991012
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002527727	T2	20020827	JP 2000-575892	19991012

JP 2003531565	T2	20031028	JP 2000-576019	19991012
WO 2000022131	A2	20000420	WO 1999-US24065	19991013
WO 2000022131	A3	20010222		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1137776	A2	20011004	EP 1999-950301	19991013

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 2003525018	T2	20030826	JP 2000-576021	19991013
US 2003018182	A1	20030123	US 2001-876252	20010607
US 2002193584	A1	20021219	US 2001-995225	20011126
US 2003139588	A9	20030724		
US 2003023069	A1	20030130	US 2002-83168	20020226
US 2003105292	A1	20030605	US 2002-251385	20020920
US 2003166148	A1	20030904	US 2002-321807	20021216

PRIORITY APPLN. INFO.:

US 1997-839449	B2	19970414
US 1998-60188	A2	19980414
US 1998-90783P	P	19980626
US 1998-95677P	P	19980807
US 1998-170496	A	19981013
US 1998-108029P	P	19981112
US 1998-109213P	P	19981120
US 1998-110060P	P	19981127
US 1999-120416P	P	19990216
US 1999-121852P	P	19990226
US 1999-123944P	P	19990312
US 1999-123945P	P	19990312
US 1999-123946P	P	19990312
US 1999-123948P	P	19990312
US 1999-123949P	P	19990312
US 1999-123951P	P	19990312
US 1999-136436P	P	19990528
US 1999-136437P	P	19990528
US 1999-136439P	P	19990528
US 1999-136567P	P	19990528
US 1999-137127P	P	19990528
US 1999-137131P	P	19990528
US 1999-137567P	P	19990528
US 1999-141448P	P	19990629
US 1999-151114	A	19990827
US 1999-151114P	P	19990827
US 1999-152524P	P	19990903
US 1999-156653P	P	19990909
US 1999-156555P	P	19990929
US 1999-156633P	P	19990929
US 1999-156634P	P	19990929
US 1999-157280P	P	19991001
US 1999-157281P	P	19991001
US 1999-157282P	P	19991001
US 1999-157293P	P	19991001
US 1999-157294P	P	19991001

US 1999-416760	A	19991012
US 1999-417044	A	19991012
WO 1999-US23935	W	19991012
WO 1999-US23938	W	19991012
WO 1999-US24065	W	19991013
US 2000-714008	B1	20001116
US 2000-253404P	P	20001127
US 2000-255366P	P	20001212
US 2001-270266P	P	20010220
US 2001-270286P	P	20010220
US 2001-271913P	P	20010226
US 2001-282032P	P	20010406
US 2001-282356P	P	20010406
US 2001-282358P	P	20010406
US 2001-282365P	P	20010406
US 2001-290917P	P	20010514
US 2001-309208P	P	20010731

AB Constitutively activated variants of human G protein coupled **receptors** (GPCR) that have a substitution of a 15 amino acid region between a conserved proline and a conserved lysine in **transmembrane** loop 6 (TM6) and intracellular loop 3 (IC3) are described. The purified and isolated non-endogenous human GPCRs having these mutations, and the **receptors** incorporated into mammalian **cells**, are well within the present disclosure. The method is specifically intended for use in identifying ligands that can disrupt signal **transduction** mediated by orphan **receptors** without any knowledge of the true ligand for the **receptor**. Cloning of cDNAs for a no. of G protein coupled **receptors**, identification of the conserved region and site-directed mutagenesis of the conserved region are described. Constitutive variants of a no. of orphan **receptors** and **receptors** with known ligands were generated.

REFERENCE COUNT: 160 THERE ARE 160 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 11 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:320041 HCAPLUS
DOCUMENT NUMBER: 138:335903
TITLE: Identification of genes expressed in skeletal muscle associated with abnormal glucose tolerance for diagnosis of type 2 diabetes mellitus using microarrays
INVENTOR(S): Lindgren, Cecilia M.; Hirschhorn, Joel N.; Tamayo, Pablo; Daly, Mark J.; Lander, Eric S.; Altshuler, David M.
PATENT ASSIGNEE(S): Whitehead Institute for Biomedical Research, USA; The General Hospital Corporation; University of Lund
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2003033676 A2 20030424 WO 2002-US33524 20021017
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: US 2001-330147P P 20011017
AB The present invention features method for identifying an individual having impaired glucose tolerance, impaired glucose homeostasis and/or type 2 diabetes mellitus according to gene expression profiles of informative genes. The present invention also features methods of identifying a compd. that modulates impaired glucose tolerance, impaired glucose homeostasis and/or type 2 diabetes mellitus, as well **oligonucleotide** microarrays having immobilized thereon one or more probes for one or more informative genes.

L38 ANSWER 12 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:262063 HCAPLUS
DOCUMENT NUMBER: 138:283689
TITLE: Identification of modulatory molecules with **transgenic cells** expressing target protein genes from inducible promoters
INVENTOR(S): Brown, Steven J.; Dunnington, Damien J.; Clark, Imran
PATENT ASSIGNEE(S): Axiom Biotechnologies, Inc., USA
SOURCE: PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003027634	A2	20030403	WO 2002-US30249	20020923

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003082511 A1 20030501 US 2001-965201 20010925
PRIORITY APPLN. INFO.: US 2001-965201 A 20010925
AB Methods for identifying an ion channel modulator, a target membrane **receptor** modulator mol., and other modulatory mols. are disclosed, as well as **cells** and vectors for use in those methods. A **polynucleotide** encoding target is provided in a **cell**

under control of an inducible promoter, and candidate modulatory mols. are contacted with the **cell** after induction of the promoter to ascertain whether a change in a measurable physiol. parameter occurs as a result of the candidate modulatory mol. Thus, CHO **cells** were **transformed** with a vector contg. the mouse voltage-gated potassium channel KCNC1 gene controlled by a tetracycline-inducible promoter. A membrane potential assay was used to demonstrate inhibition of KCNC1 by 4-aminopyridine and BaCl2 in doxycycline-induced **cells**. A similar system is described for **screening** for modulators of ciliary neurotrophic factor **receptors**. In this case the assay comprises measurement of STAT3 protein phosphorylation.

L38 ANSWER 13 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:221911 HCAPLUS
DOCUMENT NUMBER: 138:251130
TITLE: Method and system for classifying a scenario
INVENTOR(S): Chaplen, Frank W. R.; Gerwick, William H.; Jovanovic, Goran; Kolodziej, Wojtek J.; Liburdy, Jim; McFadden, Phil; Paul, Brian K.; Plant, Thomas K.; Trempy, Janine E.; Willard, Corwin; Pacut, Andrzej; Upson, Rosalyn H.; Roussel, Nicolas
PATENT ASSIGNEE(S): Oregon State University, USA
SOURCE: PCT Int. Appl., 193 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003023366	A2	20030320	WO 2002-US29085	20020912

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-322004P P 20010912
AB Living **cells** can be used to identify or quantify bioactive conditions, including without limitation, chems., biol. pathogens, and environmental conditions, such as pH, in samples based on changes in, for example, **cell** color, morphol. and/or physiol. Such changes can be directly detected or detected with the aid of instrumentation. One embodiment of the method comprises exposing a system to a bioactive condition, such as a chem. agent, a biol. pathogen, an environmental condition, such as pH, etc., and combinations of such conditions. The system then exhibits a response to the bioactive condition. The response of the system, or a portion thereof, to the bioactive condition is then represented, such as by digital images. The method then involves attempting to classify a scenario by database comparison. Classification can be in terms of numeric or non-numerical classifiers. Typically, the

system comprises living **cells**. Living **cells** useful for practicing the method experience a detectable change in response to an interaction with a bioactive condition. A likely living **cell** for use with the method and app. of the present invention is a chromatophore. The present method has a no. of uses, including classifying unknown drug candidates, classifying unknown toxins, classifying chem. warfare agents, etc. The method a can be implemented using a computer program encoding the method. Moreover, a computer-readable medium is described on which is stored a computer program having instructions for executing the method. A cytosensor app. also is described. Betta chromatophores were isolated and used in cytosensors to detect biol. toxins in food and water, a calcium ion channel in erythrophores, and other agents. A two-**cell** cytosensor contg. chromatophores and a small inoculum of a selected microbial **cell** was used to test potential antibiotics.

L38 ANSWER 14 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:221822 HCAPLUS
DOCUMENT NUMBER: 138:249918
TITLE: Novel human ion channel sequence homologs and uses in treatment and diagnosis of mental disorders
INVENTOR(S): Roberds, Steven L.; Benjamin, Christopher W.; Karnovsky, Alla M.; Ruble, Cara L.
PATENT ASSIGNEE(S): Pharmacia & Upjohn Company, USA
SOURCE: PCT Int. Appl., 146 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003023014	A2	20030320	WO 2002-US29087	20020912
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003194720	A1	20031016	US 2002-243475	20020912

PRIORITY APPLN. INFO.: US 2001-318733P P 20010912
US 2002-403254P P 20020813

AB The present invention provides novel ion channel polypeptides and **polynucleotides** which identify and encode them. In addn., the invention provides expression vectors, host **cells** and methods for their prodn. The invention also provides methods for the identification of ion channel agonists/antagonists, useful for the treatment of human diseases and conditions. In addn., the invention provides expression vectors, host **cells** and methods for their prodn. The invention also provides methods for the identification of ion channel agonists/antagonists, useful for the treatment of human diseases,

in particular, mental disease.

L38 ANSWER 15 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:154442 HCAPLUS
DOCUMENT NUMBER: 138:198551
TITLE: Use of intrinsic reporters of **cell** signaling for high content drug profiling and toxicity **screening**
INVENTOR(S): Sealfon, Stuart; Wurmbach, Elisa; Yuen, Tony
PATENT ASSIGNEE(S): Mount Sinai School of Medicine, USA
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003016327	A1	20030227	WO 2002-US25772	20020814
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003165916	A1	20030904	US 2002-218969	20020814

PRIORITY APPLN. INFO.: US 2001-312220P P 20010814
US 2001-324895P P 20010926

AB The invention identifies essentially all of the members of a specific group of genes that are preferentially **transcribed** upon the initialization of a signal **transduction** pathway. The invention also discloses methods for detecting and/or quantifying the **transcription** of these specific genes. The invention further discloses methods of using this information to characterize the effect of potential drugs on a **cell**. Solid supports comprising nucleic acids that can hybridize with the **transcripts** from this specific group of genes are also described.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 16 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:133433 HCAPLUS
DOCUMENT NUMBER: 138:198646
TITLE: Compositions and methods for modulation of DARPP-32 phosphorylation
INVENTOR(S): Greencard, Paul; Svenningsson, Per; Rakhilin, Sergey V.; Starkova, Natalia
PATENT ASSIGNEE(S): The Rockefeller University, USA
SOURCE: PCT Int. Appl., 166 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003014321	A2	20030220	WO 2002-US25455	20020812
WO 2003014321	A3	20030828		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003171255	A1	20030911	US 2002-218137	20020812

PRIORITY APPLN. INFO.: US 2001-311641P P 20010810

AB The present invention provides methods and compns. for modulating the phosphorylation of DARPP-32 in a **serotonergic receptor** intracellular signaling pathway. The invention provides methods and compns. for modulating the activities of protein phosphatase-1 (PP-1), protein phosphatase 2C (PP2C), protein phosphatase 2B (PP2B) and/or protein phosphatase 2a (PP2A) in **cells** or tissues. The invention provides methods of treating **serotonergic** intracellular signaling pathway disorders, e.g., depression. The invention provides methods of treating dopamine-related disorders. The invention provides methods of identifying agents that modulate the activities of **serotonergic receptor** intracellular signaling mols., DARPP-32, casein kinase 1, cyclin-dependent kinase 5, AMPA **receptors**, protein phosphatase-1, protein phosphatase 2C, protein phosphatase 2B and/or protein phosphatase 2A, for use in such treatments. The invention also provides methods of modulating phosphorylation-dependent activation of AMPA **receptors** for use in such treatments.

L38 ANSWER 17 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:97919 HCAPLUS
DOCUMENT NUMBER: 138:148748
TITLE: Protein and cDNA sequences of 19 human secreted proteins and diagnostic use
INVENTOR(S): Fiscella, Michele; Wei, Ping; Lafleur, David W.; Olsen, Henrik S.; Baker, Kevin P.; Ebner, Reinhard; Komatsoulis, George A.; Rosen, Craig A.; Ruben, Steven M.; Duan, Roxanne D.; Young, Paul E.; Florence, Kimberly A.; Moore, Paul A.; Birse, Charles E.; Ni, Jian; Soppet, Daniel R.; Shi, Yanggu
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 182 pp., Cont.-in-part of Appl. No. PCT/US00/28664.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003027297	A1	20030206	US 2001-832129	20010411
WO 2001032837	A1	20010510	WO 2000-US28664	20001017

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-163085P P 19991102
US 1999-172411P P 19991217
WO 2000-US28664 A2 20001017

AB The invention provides protein and cDNA sequences of 19 human secreted proteins. Also provided are vectors, host **cells**, antibodies, and recombinant methods for producing human polypeptides. The invention also relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to 19 human secreted proteins. The invention further relates to **screening** methods for identifying binding partners of 19 human secreted proteins.

L38 ANSWER 18 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:77610 HCAPLUS
DOCUMENT NUMBER: 138:132168
TITLE: **Transgenic** mice containing serotonin **receptor 5-HT**-2B gene disruptions for use in drug **screening**
INVENTOR(S): Brennan, Thomas J.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 24 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003023998	A1	20030130	US 2001-903376	20010710
WO 2002003793	A3	20030213	WO 2001-US21923	20010710

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, US, US, US, US, US, US, US, US, US, US, US, US, US, US, US, US, US, US, US, UZ

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-218358P P 20000712

US 2000-223120P P 20000807
US 2000-223122P P 20000807
US 2000-217058P P 20000710
US 2000-217179P P 20000710
US 2000-217223P P 20000710
US 2000-217253P P 20000710
US 2000-217255P P 20000710
US 2000-217256P P 20000710
US 2000-217257P P 20000710
US 2000-217347P P 20000711
US 2000-217629P P 20000711
US 2000-217537P P 20000712
US 2000-218069P P 20000712
US 2000-218074P P 20000712
US 2000-221483P P 20000727
US 2000-243958P P 20001026
US 2000-249408P P 20001115
US 2000-252299P P 20001120
US 2001-262113P P 20010116
US 2001-262205P P 20010116

AB The present invention provides **transgenic** mice comprising disruption of **5-HT**-2B gene encoding **5-HT receptors**. Such **transgenic** mice are useful as models for disease and for identifying agents that modulate gene expression and gene function, and as potential treatments for various disease states and disease conditions. In particular, mice with **5-HT**-2B gene disruptions show embryonic lethality, abnormal embryos, retarded development and reabsorbed embryos. Development may be arrested between embryonic day 8.5 and 9.5.

L38 ANSWER 19 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:946915 HCAPLUS
DOCUMENT NUMBER: 138:344
TITLE: Identification of molecular targets useful in treating substance abuse and addiction
INVENTOR(S): Chen, Hao; Manyak, David M.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 51 pp., Cont.-in-part of U.S. Ser. No. 558,232.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002187514	A1	20021212	US 2002-105407	20020326

PRIORITY APPLN. INFO.: US 1999-130992P P 19990426
US 2000-558232 A2 20000426

AB The invention provides methods for detg. a set of one or more mol. targets for developing a treatment for abuse of, or addiction to, a substance. The methods involve detg. a biol. activity profile by detg. a set of mol. targets whose activity is affected by the abused or addictive substance. The biol. activity profile may then be used in other methods of the invention to identify at least one chem. compd. to treat abuse or addiction. The chem. compds. interact with the mol. targets in a manner

substantially the same as the abused or addictive substance. The invention also provides methods for treating substance abuse wherein chem. compds. identified by the methods of the invention are administered in effective amts. to patients in need thereof. A computer system for implementing the methods of the invention is also provided. Assays used in **screening** cocaine and other addictive substances for activity on dopamine, serotonin, and norepinephrine **transporters**, and on .sigma.-1 and 5HT-3 **receptors** are described.

L38 ANSWER 20 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:884826 HCAPLUS
DOCUMENT NUMBER: 138:297773
TITLE: Aequorin-based functional assays for G-protein-coupled **receptors**, ion channels and tyrosine kinase **receptors**
AUTHOR(S): Dupriez, Vincent J.; Maes, Karlien; Le Poul, Emmanuel; Burgeon, Emmanuel; Detheux, Michel
CORPORATE SOURCE: Euroscreen s.a., Gosselies, Belg.
SOURCE: Receptors and Channels (2002), 8(5/6), 319-330
CODEN: RCHAE4; ISSN: 1060-6823
PUBLISHER: Taylor & Francis Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Aequorin is a photoprotein originating from jellyfish, whose luminescent activity is dependent on the concn. of calcium ions. Due to the high sensitivity and low background linked to luminescent assays, as well as to its absence of toxicity and its large linear dynamic range, aequorin has been used as an intracellular calcium indicator since its discovery in the early 1960s. The first applications of aequorin involved its microinjection in **cells**. The cloning of its gene in 1985 opened the way to the stable expression of aequorin in **cell** lines or even entire organisms. Here the authors present the validation of aequorin as a functional assay for the **screening** of G-protein-coupled **receptors**, ion channels, and tyrosine kinase **receptors**, as well as for their pharmacol. characterization in agonist and antagonist detection assays. The authors optimized the authors' **cell** suspension-based assay and detd. that the most sensitive assay was performed at room temp., with mitochondrially expressed aequorin and using coelenterazine deriv. h for reconstitution of aequorin. The robustness of the assay and the current availability of luminometers with integrated injectors allow aequorin to fit perfectly with high throughput functional assays requirements.
REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 21 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:869178 HCAPLUS
DOCUMENT NUMBER: 137:363026
TITLE: Matrix assays in genomically indexed **cells** for ascertaining the functional patterns of pharmacologically important compounds
INVENTOR(S): Dunnington, Damien John; Brown, Steven J.; Veerapandian, Pandi
PATENT ASSIGNEE(S): Axiom Biotechnologies, Inc., USA
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002090927	A2	20021114	WO 2002-US14257	20020502
WO 2002090927	A3	20030626		

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003100997	A1	20030529	US 2002-139068	20020502

PRIORITY APPLN. INFO.: US 2001-288966P P 20010504

AB A method for ascertaining the functional patterns of pharmacol. important compds. by measuring the physiol. effect of a plurality of compds. on a plurality of **cells** comprises assaying the plurality of compds. to obtain a first set of data detg. the physiol. effect of each compd. on each **cell**; assaying at least one known pharmaceutically important compd. to obtain a second set of data detg. the physiol. effect of the known pharmaceutically important compd. on each **cell**; and comparing the first and second sets of data to identify a compd. having similar physiol. effects as the known pharmaceutically important compd. thereby ascertaining its functional patterns.

L38 ANSWER 22 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:778147 HCAPLUS
DOCUMENT NUMBER: 137:289940
TITLE: **Transgenic** mice containing 5-HT5B serotonin **receptor** gene disruptions and uses in **screening** drug
INVENTOR(S): Allen, Keith D.
PATENT ASSIGNEE(S): Deltagen, Inc., USA
SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002079443	A2	20021010	WO 2002-US9853	20020329

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,

CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003009780 A1 20030109 US 2002-109532 20020328
PRIORITY APPLN. INFO.: US 2001-280553P P 20010329
US 2001-342472P P 20011221
US 2002-109532 A1 20020328

AB The present invention provides **transgenic** mice comprising a disruption in a 5-HT5B serotonin **receptor** gene and methods for the characterization of 5-HT5B serotonin **receptor** gene function. Such **transgenic** mice are useful as models for disease and for identifying agents that modulate 5-HT5B serotonin **receptor** gene expression and 5-HT5B serotonin **receptor** gene function, and as potential treatments for various disease states and disease conditions.

L38 ANSWER 23 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:755055 HCAPLUS
DOCUMENT NUMBER: 137:258485
TITLE: Methods for diagnosing and monitoring ovarian cancer by profiling associated marker genes using comparative genomic hybridization array
INVENTOR(S): Chin, Koei; Kuo, Wen-lin; Pinkel, Daniel; Albertson, Donna; Collins, Colin; Gray, Joe W.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 24 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002142305	A1	20021003	US 2001-819103	20010327
WO 2002077292	A1	20021003	WO 2002-US9804	20020326

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-819103 A 20010327
AB This invention pertains to the discovery that an amplification of some genes or an increase in that gene activity and a deletion of some genes or a decrease in that gene activity is a marker for the presence of, progression of, or predisposition to, a cancer (e.g., ovarian cancer). Using this information, this invention provides methods of detecting a predisposition to cancer in an animal. The methods involve (i) providing a biol. sample from an animal (e.g. a human patient); (ii) detecting the level of the genes of the present invention within the biol. sample; and (iii) comparing the level of one or more of said genes with a level of one or more of said genes in a control sample taken from a normal, cancer-free tissue. In particular, array comparative genomic hybridization using 5'-amino-linked degenerate **oligonucleotide** primer (DOP) PCR is used to analyze gene amplification or deletion assocd. ovarian cancer.

Approx. twenty amplified or deleted (with >0.4% fold gain or loss of expression at mRNA level) genomic regions with ref. GenBank nos. are identified to be assocd. with human ovarian tumors. Gene-specific arrays targeted to these ovarian tumor-assocd. markers are described for diagnosis, drug **screening** and therapy applications.

L38 ANSWER 24 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:637801 HCAPLUS
DOCUMENT NUMBER: 137:180780
TITLE: Collections of **transgenic** animal lines in which a subset of **cells** characterized by expression of an endogenous "characterizing" gene and uses
INVENTOR(S): Serafini, Tito Andrew
PATENT ASSIGNEE(S): Renovis, Inc., USA
SOURCE: PCT Int. Appl., 170 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002064749	A2	20020822	WO 2002-US4765	20020214
WO 2002064749	A3	20030320		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003051266	A1	20030313	US 2001-783487	20010214

PRIORITY APPLN. INFO.: US 2001-783487 A 20010214

AB The invention provides lines of **transgenic** animals, preferably mice, in which a subset of **cells** characterized by expression of a particular endogenous gene (a "characterizing gene") expresses, either constitutively or conditionally, a "system gene," which preferably encodes a detectable or selectable marker or a protein product that induces or suppresses the expression of a detectable or selectable marker (e.g., the protein product is a **transcription** factor and the expression of the detectable or selectable marker, or suppression thereof is dependent upon the **transcription** factor, for example, the **nucleotide** sequence encoding the detectable or selectable marker is operatively linked to a regulatory element recognized by the system gene product) allowing detection, isolation and/or selection of the subset of **cells** from the other **cells** of the **transgenic** animal, or explanted tissue thereof. In a preferred embodiment, the **transgene** introduced into the **transgenic** animal includes at least the coding region sequences for the system gene product operably linked to all or a portion of the regulatory sequences from the characterizing gene such that the system gene has the same pattern of expression within the animal (i.e., is expressed substantially

in the same population of **cells**) or within the anatomical region contg. the **cells** to be analyzed as the characterizing gene. The invention provides collections of such lines of **transgenic** animals and vectors for producing them, and also provides methods for the detection, isolation and/or selection of a subset of **cells** expressing the marker gene in such **transgenic** animal lines. The vector (preferably a BAC) comprising the system gene coding sequences and characterizing gene sequences is then introduced into the genome of a potential founder animal to generate a line of **transgenic** animals. Also, preferably, the **transgene** contg. the system gene coding sequences and characterizing gene sequences is present in the genome at a site other than where the endogenous characterizing gene is located. Such **transgenic** animals can then be used to detect, isolate and/or select pure populations of **cells** having a particular functional characteristic, preferably **cells** of the nervous system. Creation of **transgenic** mouse line expressing a 5HT2A **receptor** BAC was demonstrated. The isolated **cells** have uses in gene discovery, target identification and validation, genomic and proteomics anal., etc.

L38 ANSWER 25 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:575793 HCAPLUS
DOCUMENT NUMBER: 137:136068
TITLE: Identifying Alzheimer's disease therapeutics using **transgenic** animal models
INVENTOR(S): Games, Kate Dora; Schenk, Dale Bernard; McConlogue, Lisa Claire; Seubert, Peter Andrew; Rydel, Russell E.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 62 pp., Cont.-in-part of U.S. Ser. No. 660,487, abandoned.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002104104	A1	20020801	US 1998-149718	19980908
PRIORITY APPLN. INFO.:			US 1995-480653 B2	19950607
			US 1995-486538 B2	19950607
			US 1996-659797 B2	19960607
			US 1996-660487 B2	19960607

AB The construction of **transgenic** animal models of human Alzheimer's disease, and methods of using the models to **screen** potential Alzheimer's disease therapeutics, are described. The models are characterized by pathologies similar to pathologies obsd. in Alzheimer's disease, based on expression of all three forms of the .beta.-amyloid precursor protein (APP), APP695, APP751, and APP770, as well as various point mutations based on naturally occurring mutations, such as the London and Indiana familial Alzheimer's disease (FAD) mutations at amino acid 717, predicted mutations in the APP gene, and truncated forms of APP that contain the A.beta. region. Animal **cells** can be isolated from the **transgenic** animals or prepd. using the same constructs with std. techniques such as lipofection or electroporation. The **transgenic** animals, or animal **cells**, are used to **screen** for compds. altering the pathol. course of Alzheimer's

disease as measured by their effect on the amt. of APP, .beta.-amyloid peptide, and numerous other Alzheimer's disease markers in the animals, the neuropathol. of the animals, as well as by behavioral alterations in the animals.

L38 ANSWER 26 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:461229 HCAPLUS
DOCUMENT NUMBER: 137:42672
TITLE: A yeast expression system presenting a G protein coupled **receptor** and a cognate G protein on the **cell** surface for **screening** for **receptor** ligands
INVENTOR(S): Pausch, Mark Henry; Ozenberger, Bradley Alton; Hadcock, John Richard; Price, Laura Alicia; Kajkowski, Eileen Marie; Kirsch, Donald Richard; Chaleff, Deborah Tardy
PATENT ASSIGNEE(S): Basf Aktiengesellschaft, Germany
SOURCE: U.S., 57 pp., Cont.-in-part of U.S. 5,691,188.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6406871	B1	20020618	US 1996-696924	19961015
US 5691188	A	19971125	US 1994-195729	19940214
WO 9521925	A1	19950817	WO 1995-US2075	19950214

W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, FI, GE, HU, JP, KG, KP, KR, KZ, LK, LT, LV, MD, MG, MN, NO, NZ, PL, RO, RU, SD, SI, SK, TJ, TT, UA, US, UZ
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1994-195729 A2 19940214
WO 1995-US2075 W 19950214

AB A yeast expression system that can be used to identify ligands for the **receptor** is described. The host **cell** expresses genes for the **receptor**, such as the somatostatin **receptor**, and for its cognate G proteins, which may include all of the components of the .alpha..beta..gamma. complex. The **receptor** is integrated into the host **cell** membrane in proper orientation for both stereoselective binding of ligands, as well as functional interaction with G proteins on a cytoplasmic side of the **cell** membrane. In some embodiments, the G protein .alpha. subunit gene is mammalian and is expressed in conjunction with the genes for the yeast G protein .beta..gamma. subunits. A second aspect of the present invention provides expression vectors encoding chimeric yeast/heterologous G protein coupled **receptors** and yeast **cells transformed** with them. A third aspect of the present invention is directed to methods of assaying compds. using such expression constructs and yeast **cell** expression systems to det. the effects of ligand binding to the heterologous **receptors** expressed in the systems.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 27 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:461226 HCAPLUS
DOCUMENT NUMBER: 137:30221
TITLE: Method for identification of interventions which mimic effects of calorie restriction on aging
INVENTOR(S): Spindler, Stephen R.
PATENT ASSIGNEE(S): The Regents of the University of California, USA
SOURCE: U.S., 150 pp., Cont.-in-part of U.S. Ser. No. 471,225.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6406853	B1	20020618	US 2000-648642	20000825
US 6391270	B1	20020521	US 1999-471225	19991223
WO 2001045752	A1	20010628	WO 2000-US35437	20001222
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001024612	A5	20010703	AU 2001-24612	20001222
EP 1239885	A1	20020918	EP 2000-988400	20001222
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003517830	T2	20030603	JP 2001-546691	20001222
US 2003124540	A1	20030703	US 2002-56749	20020122
US 2003224360	A9	20031204		

PRIORITY APPLN. INFO.:
US 1999-471225 A2 19991223
US 1999-471224 A 19991223
US 2000-648642 A 20000825
WO 2000-US35437 W 20001222

AB Long term calorie restriction has the benefit of increasing life span. Methods to **screen** interventions that mimic the effects of calorie restriction are disclosed. Extensive anal. of genes for which expression is statistically different between control and calorie-restricted animals (mice) has demonstrated that specific genes are preferentially expressed during calorie restriction. **Screening** for interventions which produce the same expression profile will provide interventions that increase life span. In a further aspect, it has been discovered that mice on a calorie-restricted diet for a relatively short time have a similar gene expression profile to mice which have been on a long term calorie-restricted diet. Thus, to identify effects of caloric restriction on global patterns of gene expression, gene chip technol. was utilized to characterize the effects of long and short term caloric restriction on the expression of approx. 11,000 genes in the liver. In both long and short term caloric restriction mice, changes were obsd. in expression of immune system genes, genes enhancing genetic stability and apoptosis, genes of the enteric nervous system, and liver-specific genes. The expression of chaperone genes, e.g., Erp72, Erp57, GRP170, GRP78,

GRP94, and HSC70, calnexin and calreticulin, were particularly affected.
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 28 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:315127 HCAPLUS
DOCUMENT NUMBER: 136:323412
TITLE: Protein-protein interactions in neurodegenerative diseases
INVENTOR(S): Roch, Jean-Marc; Bartel, Paul L.; Heichman, Karen
PATENT ASSIGNEE(S): Myriad Genetics, Inc., USA
SOURCE: PCT Int. Appl., 93 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002033114	A2	20020425	WO 2001-US32199	20011016
WO 2002033114	A3	20030213		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002119155	A1	20020829	US 2001-972038	20011009
US 2002119927	A1	20020829	US 2001-972757	20011009
US 2003186317	A1	20031002	US 2001-971782	20011009
US 2002106773	A1	20020808	US 2001-973064	20011010
US 2002115119	A1	20020822	US 2001-973063	20011010
US 2002114799	A1	20020822	US 2001-973077	20011010
US 2002106676	A1	20020808	US 2001-973963	20011011
US 6653102	B2	20031125		
US 2002115606	A1	20020822	US 2001-973964	20011011
US 2002124273	A1	20020905	US 2001-973965	20011011
US 2002164655	A1	20021107	US 2001-973941	20011011
US 2002115607	A1	20020822	US 2001-975072	20011012
WO 2002032286	A2	20020425	WO 2001-US32186	20011016
WO 2002032286	A3	20030116		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2000-240790P P 20001017
US 2001-304775P P 20010713

AB The present invention relates to the discovery of protein-protein interactions that are involved in the pathogenesis of neurodegenerative disorders, including Alzheimer's disease (AD). Thus, the present invention is directed to complexes of these proteins and/or their fragments, antibodies to the complexes, diagnosis of neurodegenerative disorders (including diagnosis of a predisposition to and diagnosis of the existence of the disorder), drug **screening** for agents which modulate the interaction of proteins described herein, and identification of addnl. proteins in the pathway common to the proteins described herein. A yeast two-hybrid system with bait protein generated from brain cDNA was used to **screen** a human brain cDNA library for binding proteins.

L38 ANSWER 29 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:315126 HCAPLUS
DOCUMENT NUMBER: 136:323411
TITLE: Protein-protein interactions in neurodegenerative diseases
INVENTOR(S): Roch, Jean-Marc; Bartel, Paul L.; Heichman, Karen
PATENT ASSIGNEE(S): Myriad Genetics, Inc., USA
SOURCE: PCT Int. Appl., 91 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002033113	A2	20020425	WO 2001-US32197	20011016
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002119155	A1	20020829	US 2001-972038	20011009
US 2002119927	A1	20020829	US 2001-972757	20011009
US 2003186317	A1	20031002	US 2001-971782	20011009
US 2002106773	A1	20020808	US 2001-973064	20011010
US 2002115119	A1	20020822	US 2001-973063	20011010
US 2002114799	A1	20020822	US 2001-973077	20011010
US 2002106676	A1	20020808	US 2001-973963	20011011
US 6653102	B2	20031125		
US 2002115606	A1	20020822	US 2001-973964	20011011
US 2002124273	A1	20020905	US 2001-973965	20011011
US 2002164655	A1	20021107	US 2001-973941	20011011
US 2002115607	A1	20020822	US 2001-975072	20011012
WO 2002032286	A2	20020425	WO 2001-US32186	20011016
WO 2002032286	A3	20030116		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,				

UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-240790P P 20001017
US 2001-304775P P 20010713

AB The present invention relates to the discovery of protein-protein interactions that are involved in the pathogenesis of neurodegenerative disorders, including Alzheimer's disease (AD). Thus, the present invention is directed to complexes of these proteins and/or their fragments, antibodies to the complexes, diagnosis of neurodegenerative disorders (including diagnosis of a predisposition to and diagnosis of the existence of the disorder), drug **screening** for agents which modulate the interaction of proteins described herein, and identification of addnl. proteins in the pathway common to the proteins described herein. A yeast two-hybrid system with bait and prey proteins generated from brain cDNA was used to det. interacting proteins. A complex of Mint2 and PDE-9A is specified in the claims.

L38 ANSWER 30 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:315125 HCAPLUS
DOCUMENT NUMBER: 136:323410
TITLE: Protein-protein interactions in neurodegenerative diseases
INVENTOR(S): Roch, Jean-Marc; Bartel, Paul L.; Heichman, Karen
PATENT ASSIGNEE(S): Myriad Genetics, Inc., USA
SOURCE: PCT Int. Appl., 91 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002033112	A2	20020425	WO 2001-US32196	20011016
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002119155	A1	20020829	US 2001-972038	20011009
US 2002119927	A1	20020829	US 2001-972757	20011009
US 2003186317	A1	20031002	US 2001-971782	20011009
US 2002106773	A1	20020808	US 2001-973064	20011010
US 2002115119	A1	20020822	US 2001-973063	20011010
US 2002114799	A1	20020822	US 2001-973077	20011010
US 2002106676	A1	20020808	US 2001-973963	20011011
US 6653102	B2	20031125		
US 2002115606	A1	20020822	US 2001-973964	20011011
US 2002124273	A1	20020905	US 2001-973965	20011011
US 2002164655	A1	20021107	US 2001-973941	20011011

US 2002115607 A1 20020822 US 2001-975072 20011012
WO 2002032286 A2 20020425 WO 2001-US32186 20011016
WO 2002032286 A3 20030116
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: US 2000-240790P P 20001017
US 2001-304775P P 20010713

AB The present invention relates to the discovery of protein-protein interactions that are involved in the pathogenesis of neurodegenerative disorders, including Alzheimer's disease (AD). Thus, the present invention is directed to complexes of these proteins and/or their fragments, antibodies to the complexes, diagnosis of neurodegenerative disorders (including diagnosis of a predisposition to and diagnosis of the existence of the disorder), drug **screening** for agents which modulate the interaction of proteins described herein, and identification of addnl. proteins in the pathway common to the proteins described herein. A yeast two-hybrid system with bait and prey proteins generated from brain cDNA was used to det. interacting proteins. A complex of CIB and MLK2 is specified in the claims.

L38 ANSWER 31 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:276216 HCAPLUS
DOCUMENT NUMBER: 136:290023
TITLE: Gene expression profiling of antidepressant action in the brain and method for **screening** for antidepressants
INVENTOR(S): Bonaventure, Pascal; Quo, Jongqing; Liu, Xuejun; Kamme, Fredrik; Meurers, Bernhard; Leysen, Josee; Bakker, Margot
PATENT ASSIGNEE(S): Ortho-McNeil Pharmaceutical, Inc., USA
SOURCE: PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002029116	A2	20020411	WO 2001-US31677	20011004

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002011600	A5	20020415	AU 2002-11600		20011004
US 2002156038	A1	20021024	US 2001-971900		20011004
PRIORITY APPLN. INFO.:			US 2000-238374P	P	20001006
			US 2001-295782P	P	20010604
			WO 2001-US31677	W	20011004

AB Disclosed is a **polynucleotide** array contg. **polynucleotides** the expression of which is increased or decreased in brain **cells** in response to stress. Thus, the invention provides gene expression profiles at a **cellular** level of multiple brain nuclei (locus coeruleus, dorsal raphe, hypothalamic paraventricular nucleus, and hippocampus) after chronic mild stress (CMS) .+-. chronic treatment with antidepressant imipramine in rats. Imipramine, a potent inhibitor of norepinephrine and serotonin uptake, was selected as ref. compd. In addn., a novel putative antidepressant was examd. to det. whether different in vitro pharmacol. properties but similar behavioral effects of imipramine and the novel compd. in the CMS model result in similar gene expression patterns. The novel compd. displays .alpha.2 adrenoceptor and 5-HT7 **receptor** antagonism. The present invention also provides potential new targets for drug discovery to identify compds. useful to treat depression.

L38 ANSWER 32 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:	2002:220850 HCAPLUS
DOCUMENT NUMBER:	136:242996
TITLE:	Haplotypes and genotyping of the human HTR5A gene encoding 5-hydroxytryptamine **receptor** 5A
INVENTOR(S):	Kazemi, Amir; Koshy, Beena; Sanchis, Angela; Tirrell, Charles
PATENT ASSIGNEE(S):	Genaissance Pharmaceuticals, Inc., USA
SOURCE:	PCT Int. Appl., 134 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002022887	A1	20020321	WO 2001-US29210	20010917
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001094586	A5	20020326	AU 2001-94586	20010917
PRIORITY APPLN. INFO.:			US 2000-233051P	P 20000915
			WO 2001-US29210	W 20010917

AB Novel single **nucleotide** polymorphisms in the human 5-hydroxytryptamine (serotonin) **receptor** 5A (HTR5A) gene are described. Twenty novel polymorphic sites and 36 isogenes are discovered by characterizing the HTR5A gene found in genomic **DNAs** isolated from an Index Repository that contains immortalized **cell** lines from one chimpanzee and 93 human individuals self-identified as belonging

to one of the four major population groups. To the extent possible, the members of this ref. population were organized into population subgroups by the self-identified ethnogeog. origin of their four grandparents. Eight polymorphic sites are identified in the coding region of HTR5A, resulting in three polymorphic positions in the protein. In addn., various genotypes, haplotypes and haplotype pairs for the HTR5A gene that exist in the population are described. Compns. and methods for haplotyping and/or genotyping the HTR5A gene in an individual are also disclosed. **Polynucleotides** contg. one or more of the HTR5A polymorphisms disclosed herein are also described.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 33 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:107507 HCAPLUS
DOCUMENT NUMBER: 136:163711
TITLE: Directed differentiation of embryonic **cells**
INVENTOR(S): Benvenisty, Nissim
PATENT ASSIGNEE(S): Yissum Research Development Company, Israel
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002010347	A2	20020207	WO 2001-IB1719	20010731
WO 2002010347	A3	20030313		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002146678	A1	20021010	US 2001-918702	20010731
EP 1315835	A2	20030604	EP 2001-965541	20010731
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.: US 2000-222160P P 20000801
US 2001-267559P P 20010209
WO 2001-IB1719 W 20010731

AB Methods are described for mapping a pathway of differentiation of a population of embryonic **cells** which includes exposing the **cells** to an exogenous factor and measuring gene expression products that are characteristic of a particular **cell** type or lineage. Directing differentiation of human embryonic **cells** relies on dissocd. embryoid bodies which are then exposed to one or more exogenous factors to enrich a culture for a particular **cell** type. The differentiated **cells** may be used for treating a medical condition in a human. Kits for detg. differentiation pathways and **screening** exogenous factors for their utility in differentiation are provided.

L38 ANSWER 34 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:72745 HCAPLUS
DOCUMENT NUMBER: 136:112684
TITLE: Methods for identifying modulators of neuronal growth
INVENTOR(S): Miller, Freda D.; Vaillant, Andrew
PATENT ASSIGNEE(S): Can.
SOURCE: U.S. Pat. Appl. Publ., 49 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002009713	A1	20020124	US 2001-852512	20010510

PRIORITY APPLN. INFO.: US 2000-203560P P 20000511
AB The invention features methods identifying compds. that modulate neuronal growth. The invention also features methods of modulating neuronal growth by modulating the p75NTR or MEK/MAPK pathways, and methods of identifying compds. that do the same.

L38 ANSWER 35 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:10543 HCAPLUS
DOCUMENT NUMBER: 136:68684
TITLE: Combinatorial libraries and vectors for surface display and secretion of antibodies
INVENTOR(S): Gyuris, Jeno; Morris, Aaron; Meier-ewert, Sebastian; Nagy, Zoltan
PATENT ASSIGNEE(S): Gpc Biotech Inc., USA; Gpc Biotech A.-G.
SOURCE: PCT Int. Appl., 88 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002000728	A2	20020103	WO 2001-US20380	20010626
WO 2002000728	A3	20030103		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002025536	A1	20020228	US 2001-891557	20010626

PRIORITY APPLN. INFO.: US 2000-214200P P 20000626
AB The authors disclose the prepn. of vectors allowing for (1) display of antibody libraries when expressed from procaryotic **cells** and, (2), secretion of **screened** antibodies on expression of the same vectors within eucaryotic **cells**.

L38 ANSWER 36 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:904271 HCAPLUS
DOCUMENT NUMBER: 136:32837
TITLE: Novel human protein sequence homologs and their cDNAs and therapeutic use thereof
INVENTOR(S): Majumder, Kumud; Spytek, Kimberly A.; Tchernev, Velizar T.; Colman, Steven D.; Padigaru, Muralidhara; Zerhusen, Bryan; Gusev, Vladimir; Burgess, Catherine; Li, Li; Malyankar, Uriel M.; Gangolli, Esha; Stone, David; Macdougall, John; Smithson, Glennda; Ellerman, Karen
PATENT ASSIGNEE(S): Curagen Corporation, USA; et al.
SOURCE: PCT Int. Appl., 189 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001094416	A2	20011213	WO 2001-US18675	20010607
WO 2001094416	A3	20030130		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2003073622	A1	20030417	US 2001-877843	20010607

PRIORITY APPLN. INFO.:
US 2000-209927P A2 20000607
US 2000-209928P A2 20000607
US 2000-210091P A2 20000607
US 2000-210208P A2 20000608
US 2000-210425P A2 20000608
US 2000-214023P A2 20000626
US 2000-214150P A2 20000626
US 2000-215005P A2 20000629
US 2001-270060P A2 20010220
US 2001-271623P A2 20010226
US 2001-278915P A2 20010326

AB Disclosed herein are human nucleic acid sequences that encode 12 novel polypeptides and their isoforms designated as NOVX (X from 1-8, both NOV1 and NOV7 with three isoforms a, b and c). Also disclosed are polypeptides encoded by these nucleic acid sequences, and antibodies, which immunospecifically-bind to the polypeptide, as well as derivs., variants, mutants, or fragments of the aforementioned polypeptide, **polynucleotide**, or antibody. The novel proteins exhibit sequence similarity to calpactin, spermadhesin, disintegrin, 5-Hydroxytryptamine-7 **receptor**, insulin growth factor binding protein, **cell** cycle P38-2G4, microsomal signal peptidase (18KDa-like), and stromal interaction mol. Protein domains, single **nucleotide** polymorphisms, tissue expression patterns, chromosomal location, and

protein similarity information are also provided. The invention further discloses therapeutic, diagnostic and research methods for diagnosis, treatment, and prevention of disorders involving any one of these novel human nucleic acids and proteins.

L38 ANSWER 37 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:831767 HCAPLUS
DOCUMENT NUMBER: 137:88421
TITLE: Genetic polymorphisms in genes associated with drug metabolism and their use in selecting drug therapies
INVENTOR(S): Stanton, Vincent; Zillmann, Martin
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 210 pp., Cont.-in-part of U.S. Ser. No. 710,467.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001034023	A1	20011025	US 2000-733000	20001207
WO 2000050639	A2	20000831	WO 2000-US1392	20000120
WO 2000050639	A3	20020510		

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2001034023	A1	20011025	US 2000-733000	20001207

PRIORITY APPLN. INFO.:

US 1999-131334P	P	19990426
US 1999-139440P	P	19990615
WO 2000-US1392	W	20000120
US 2000-696482	A2	20001024
US 2000-710467	A2	20001108
US 2000-733000	A	20001207
US 1999-121047P	P	19990222
US 1999-357743	A	19990720

AB Methods for identifying and utilizing variances in genes relating to efficacy and safety of medical therapy and other aspects of medical therapy are described, including methods for selecting an effective treatment. [This abstr. record is one of several records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

L38 ANSWER 38 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:763060 HCAPLUS
DOCUMENT NUMBER: 135:299092
TITLE: Non-endogenous, constitutively activated known G protein-coupled **receptors** useful for ligand **screening** assays
INVENTOR(S): Lehmann-Bruinsma, Karin; Liaw, Chen W.; Lin, I-Lin

PATENT ASSIGNEE(S): Arena Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 396 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001077172	A2	20011018	WO 2001-US11098	20010405
WO 2001077172	A3	20030130		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1301594	A2	20030416	EP 2001-923167	20010405
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003532057	T2	20031028	JP 2001-575642	20010405
US 2003204073	A1	20031030	US 2001-826509	20010405

PRIORITY APPLN. INFO.: US 2000-195747P P 20000407
WO 2001-US11098 W 20010405

AB The invention disclosed in this patent document relates to **transmembrane receptors**, more particularly to a human G protein-coupled **receptor** (GPCR) for which the endogenous ligand is known, and most particularly to mutated (non-endogenous) versions of the known GPCRs. Site-specific mutation ti a lysine residue is based on an algorithmic approach and is preferred at the 16th amino acid within intracellular loop 3 (IL3) region which is a positional distance from a conserved proline residue located within the **transmembrane** membrane 6 (TM6) region, thereby increasing the functional second messenger activity. The mutated GPCR versions are used in **screening** assays for the direct identification of candidate compds. as inverse agonists, agonists, and partial agonists. A GPCR fusion protein is intended to enhance the efficacy of G protein coupling with the non-endogenous GPCR, and is preferred for **screening** with a non-endogenous, constitutively activated GPCR because such an approach increases the signal that is most preferably utilized in such **screening** techniques. This is important in facilitating a significant "signal to noise" ratio. **Receptor**-based assays are also described: (1) CRE-Luc reporter and (2) 8XCre-Luc reporter assays for Gs-assocd. **receptors**; (3) AP1 reporter and (4) SRF-Luc **receptor** assays for Gq-assocd. **receptors**.

L38 ANSWER 39 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:712244 HCAPLUS
DOCUMENT NUMBER: 136:18770
TITLE: The tumor suppressor gene PTEN can regulate cardiac hypertrophy and survival
AUTHOR(S): Schwartzbauer, Gary; Robbins, Jeffrey
CORPORATE SOURCE: Department of Pediatrics, Division of Molecular

Cardiovascular Biology, Children's Hospital Research Foundation, Cincinnati, OH, 45229-3039, USA
SOURCE: Journal of Biological Chemistry (2001), 276(38), 35786-35793
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular Biology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Cardiac hypertrophy is a complex process involving the coordinated actions of many genes. In a high throughput **screen** designed to identify **transcripts** that are actively **translated** during cardiac hypertrophy, we identified a no. of genes with established links to hypertrophy, including those coding for Sp3, c-Jun, annexin II, cathepsin B, and HB-EGF, thus showing the general utility of the **screen**. Focusing on a candidate **transcript** that has not been previously linked to hypertrophy, we found that protein levels of the tumor suppressor PTEN (phosphatase and tensin homolog on chromosome ten) were increased in the absence of increased mRNA levels. Increased PTEN expression by recombinant adenovirus in cultured neonatal rat primary cardiomyocytes caused cardiomyocyte apoptosis as evidenced by increased caspase-3 activity and cleaved poly(A)DP-ribose polymerase. Expression of PTEN was also able to block growth factor signaling through the phosphatidylinositol 3,4,5-triphosphate pathway. Surprisingly, expression of a catalytically inactive PTEN mutant led to cardiomyocyte hypertrophy, with increased protein synthesis, **cell** surface area, and atrial natriuretic factor expression. This hypertrophy was accompanied by an increase in Akt activity and improved **cell** viability in culture.
REFERENCE COUNT: 69 THERE ARE 69 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 40 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:693670 HCAPLUS
DOCUMENT NUMBER: 135:267692
TITLE: **Cells** presenting estrogen **receptor** .beta. but not estrogen **receptor** .alpha. and their use in **screening** for modulators of **receptor**-dependent gene expression
INVENTOR(S): Ho, Shuk-Mei
PATENT ASSIGNEE(S): University of Massachusetts, USA
SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001069262	A1	20010920	WO 2001-US8276	20010315

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002115117 A1 20020822 US 2001-810157 20010315
PRIORITY APPLN. INFO.: US 2000-189605P P 20000315

AB An in vitro **screening** method for identifying a compd. that modulates estrogen **receptor** .beta.-mediated **cell** growth inhibition is disclosed. The method includes: providing a mammalian test **cell** contg. a functional ER.beta. protein; contacting the test **cell** with a candidate compd.; and detecting an increase or decrease in the expression of an ER.beta.-regulated gene in the presence of the candidate compd. Compds. that modulate ER.beta.-mediated **cell** growth inhibition can promote or inhibit this process. In some embodiments, the test **cell** contains no detectable ER.alpha. protein. The preferred **cells** are from normal prostate epithelium or grade 3 lesions. The ER.beta.-regulated gene can be, e.g., the genes encoding **receptor**-like tyrosine kinase (RYK), 5-hydroxytryptamine A1 **receptor** (E2c), BCL-2 related A1, embryonic growth/differentiation factor, IL-12, TL1309, or IFN-.alpha./.beta. **receptor**.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 41 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:560020 HCAPLUS
DOCUMENT NUMBER: 135:148253
TITLE: Pet-1, a novel rat ETS domain factor specific for central **5-HT** (**serotonergic**) neurons
INVENTOR(S): Deneris, Evan Samuel; Fyodorov, Dmitry Viktor; Hendricks, Timothy John
PATENT ASSIGNEE(S): Case Western Reserve University, USA
SOURCE: U.S., 34 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6268216	B1	20010731	US 1999-360779	19990726
US 6384204	B1	20020507	US 1999-435335	19991105
US 2002090647	A1	20020711	US 2001-850799	20010508
US 2003175830	A1	20030918	US 2001-27859	20011025

PRIORITY APPLN. INFO.: US 1998-94264P P 19980727
US 1999-360779 A2 19990726
US 1999-435335 A1 19991105

AB This invention relates to the cDNA sequence of a novel **transcription** factor specific for central **5-HT** (**serotonergic**) neurons, Pet-1, (PC12 ets factor) from rat. The sequence and products are useful in **screening** methods for identifying and testing agonists and antagonists of seronergic activity. Expression constructs and **oligonucleotides** are also provided. The authors report a cDNA clone prepd. from adrenal chromaffin-derived PC12 **cell RNA** that encodes a novel ETS-domain factor, Pet-1. The deduced primary structure of Pet-1 is composed of 340 amino acids and the encoded polypeptide has a predicted mol. mass of 35.4 kDa.

The pattern of Pet-1 gene expression in the neonatal rat is highly restricted and suggests that Pet-1 functions primarily in the nervous system. Adrenal gland expresses the highest level of Pet-1 among the tissues examd. In situ hybridization indicates that Pet-1 is expressed in the adrenal medulla but not the adrenal cortex. Slightly weaker Pet-1 hybridization is detected in brain and low levels are detectable in intestine and eye. Pet-1 can bind specifically to a PEA3 ETS **DNA** -binding motif and can modulate **transcription** of synthetic promoter constructs in a sequence-specific manner. The authors recently identified a neural **cell**-type specific enhancer, .beta.43', within the 3'-untranslated exon of the neuronal nicotinic acetylcholine **receptor** (nAchR) .beta.4 subunit gene. Similar to Pet-1, the .beta.4 gene is also expressed in PC12 **cells**. The presence of putative ETS-domain binding sites in the .beta.43' enhancer led the authors to hypothesize that members of the ets gene family activate neuronal nAchR genes. Cotransfection assays show that Pet-1 can activate reporter gene **transcription** in a .beta.43' enhancer-dependent and **cell** type-dependent manner. The results lead the authors to hypothesize that Pet-1 acts as a **transcriptional** regulator of downstream target genes involved in cholinergic neurotransmission.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 42 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:507951 HCAPLUS
DOCUMENT NUMBER: 135:87148
TITLE: Metal ion binding site-based method of identifying ligands of biological target molecules for drug discovery
INVENTOR(S): Elling, Christian E.; Gerlach, Lars Ole; Holst Lange, Birgitte; Pedersen, Jan Torleif; Schwartz, Thue W.
PATENT ASSIGNEE(S): 7TM Pharma, Den.
SOURCE: PCT Int. Appl., 114 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001050127	A2	20010712	WO 2000-EP13389	20001229
WO 2001050127	A3	20020131		
WO 2001050127	C2	20020912		
W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002061599	A1	20020523	US 2000-752102	20001229
EP 1242824	A2	20020925	EP 2000-993741	20001229
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
WO 2002054077 A2 20020711 WO 2001-DK867 20011221
W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: DK 1999-1879 A 19991230
DK 1999-1880 A 19991230
US 2000-175401P P 20000111
US 2000-175994P P 20000111
DK 2000-705 A 20000428
US 2000-202990P P 20000509
WO 2000-EP13389 W 20001229
DK 2001-536 A 20010330
US 2001-280237P P 20010330
OTHER SOURCE(S): MARPAT 135:87148

AB The invention provides a mol. approach for rapidly and selectively identifying small org. mol. ligands, i.e. compds., that are capable of interacting with and binding to specific sites on biol. target mols. The methods of the invention are applicable to any biol. target mol. that has or can be manipulated to have a metal-ion binding site. Biol. target mols. are e.g. proteins, polypeptides, oligopeptides, nucleic acids, carbohydrates, nucleoproteins, glycoproteins, glycolipids, lipoproteins and derivs. thereof. More specifically, the biol. target mols. include membrane **receptors**, signal **transduction** proteins, scaffolding proteins, nuclear **receptors**, steroid **receptors**, intracellular **receptors**, **transcription** factors, enzymes, allosteric enzyme regulatory proteins, growth factors, hormones, neuropeptides and Igs. A very interesting group of biol. target mols. are membrane proteins such as, e.g., **transmembrane** protein (e.g. 7 TMs). The methods described herein make it possible to construct and **screen** libraries of compds. specifically directed against predetd. epitopes on the biol. target mols. The compds. are initially constructed to be bifunctional, i.e. having both a metal-ion binding moiety, which conveys them with the ability to bind to either a natural or an artificially constructed metal-ion binding site as well as a variable moiety, which is varied chem. to probe for interactions with specific parts of the biol. target mol. located spatially adjacent to the metal-ion binding site. Compds. may subsequently be further modified to bind to the unmodified biol. target mol. without help of the bridging metal-ion. The methods according to the invention may be performed easily and quickly and lead to unambiguous results. The compds. identified by the methods may themselves be employed for various applications or may be further derivatized or modified to provide novel compds. The methodol. of the invention is useful in drug discovery.

L38 ANSWER 43 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:480632 HCAPLUS
DOCUMENT NUMBER: 135:87976
TITLE: An expression system using an autocrine phenotype in

the Saccharomyces mating type system to identify ligands for orphan G protein-coupled **receptors**
INVENTOR(S): Klein, Christine A.; Murphy, Andrew J. M.; Fowlkes, Dana M.; Broach, James; Manfredi, John; Paul, Jeremy; Trueheart, Joshua
PATENT ASSIGNEE(S): Cadus Pharmaceutical Corporation, USA
SOURCE: U.S., 67 pp., Cont.-in-part of U.S. Ser. No. 463,181, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6255059	B1	20010703	US 1996-582333	19960117
EP 915154	A1	19990512	EP 1998-202997	19940323
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
US 6100042	A	20000808	US 1994-322137	19941013
US 2003009022	A1	20030109	US 1998-201396	19981130
US 2001026926	A1	20011004	US 2000-747774	20001221
US 2003054402	A1	20030320	US 2001-953354	20010913

PRIORITY APPLN. INFO.:
US 1993-41431 B2 19930331
US 1994-190328 B2 19940131
US 1994-309313 B2 19940920
US 1994-322137 A2 19941013
US 1995-463181 B2 19950605
EP 1994-912292 A3 19940323
US 1995-461383 B2 19950605
US 1995-461598 A2 19950605
US 1995-464531 A2 19950605
US 1996-582333 A2 19960117
US 1996-587895 B2 19960117
US 1996-689172 B2 19960806

AB The present invention makes available a rapid, effective assay for **screening** and identifying pharmaceutically effective compds. that specifically interact with and modulate the activity of a **cellular receptor** or ion channel. The subject assay enables rapid **screening** of large nos. of polypeptides in a yeast expression library to identifying those polypeptides which induce or antagonize **receptor** bioactivity. The subject assay is particularly amenable for identifying surrogate ligands for orphan **receptors**. Development of a system, including altering regulation of genes of the yeast pheromone pathway and the development of modified G proteins is demonstrated. A system for **screening** for ligands for the complement C5a **receptor** is constructed.

REFERENCE COUNT: 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 44 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:320060 HCAPLUS
DOCUMENT NUMBER: 134:339179
TITLE: Nucleic acids and proteins associated with cancer as antitumor targets
INVENTOR(S): Burmer, Glenna C.; Brown, Joseph P.; Pritchard, David
PATENT ASSIGNEE(S): Lifespan Biosciences, Inc., USA

SOURCE: PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001030964	A2	20010503	WO 2000-US29126	20001020
WO 2001030964	A3	20010809		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 2001013397	A5	20010508	AU 2001-13397	20001020

PRIORITY APPLN. INFO.:
US 1999-161232P P 19991022
US 2000-693783 A 20001019
WO 2000-US29126 W 20001020

AB This invention relates to the discovery of nucleic acids assocd. with **cell** proliferation, neoplasia, **cell transformation**, malignant tumor formation and metastasis and uses therefor. The present invention provides a method for cancer diagnosing by detecting the overexpression or the underexpression of a cancer-assocd. mRNA in the tissue of interest, preferably in liver, breast, prostate, kidney and colon. In another aspect, the invention provides methods for arresting cancer and a method for identifying a modulators of cancer development.

L38 ANSWER 45 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:309828 HCAPLUS
DOCUMENT NUMBER: 135:74917
TITLE: Gene expression profiling of cultured human bronchial epithelial and lung carcinoma **cells**
AUTHOR(S): Hellmann, Gary M.; Fields, Wanda R.; Doolittle, David J.
CORPORATE SOURCE: Biological Research, Bowman Gray Technical Center, R. J. Reynolds Tobacco Company, Winston-Salem, NC, 27102, USA
SOURCE: Toxicological Sciences (2001), 61(1), 154-163
CODEN: TOSCF2; ISSN: 1096-6080
PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Lung cancer is a complex collection of diseases that is thought to begin with single mutated progenitor **cells** and culminates in any of several clin. described pathologies. Our knowledge of the mol. events that lead to different lung cancer types-small **cell** carcinoma, squamous **cell** carcinoma, adenocarcinoma, and large **cell** carcinoma-is incomplete. Nonetheless, it is evident that genetic changes that impact multiple mol. networks are involved in the generation of each specific phenotype. Due to the obvious complexity of these processes, the

simultaneous quant. monitoring of changes in the expression of genes that define these networks can provide mechanistic information to increase our understanding of the mol. basis for human pulmonary carcinogenesis. To this end, we have employed a com. available human cDNA array (Atlas Human Array, Clontech Labs.) to systematically **screen** for alterations in the expression of 600 genes in normal human bronchial epithelial (NHBE) **cells** as well as in several lung carcinoma lines. Studies on the reproducibility and variability of array results indicate that a 2-fold or greater difference in the expression of a particular gene could be considered a real difference in **transcript** abundance. Accuracy of gene expression as measured in the array was verified by comparing mRNA levels of the proto-oncogene c-myc in the array with results obtained by traditional Northern blot anal. and by quant. RT-PCR. Gene expression profiles were compared within and among **cell** types. The differential expression of 17 genes, including downregulation of MRP8 and MRP14 and upregulation of CYP1B1, was obsd. in all four carcinoma lines compared to NHBE **cells**. The direction of all 17 gene expression differences, either upregulation or downregulation relative to NHBE **cells**, was the same for all four carcinoma lines, underscoring their common mol. features. Each lung tumor line also exhibited a no. of unique differences compared to both normal **cells** and the other tumor **cell** lines. These differences may be due to differences in the **cellular** origin and/or pathol. of the **cell** lines studied.

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 46 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:300912 HCAPLUS
DOCUMENT NUMBER: 134:321621
TITLE: Polymorphisms in the human 5-hydroxytryptamine (serotonin) **receptor** 1E (HTR1E) gene as drug targets
INVENTOR(S): Choi, Julie Y.; Denton, R. Rex; Nandabalan, Krishnan; Stephens, J. Claiborne
PATENT ASSIGNEE(S): Genaissance Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001029263	A1	20010426	WO 2000-US28584	20001016

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-160280P P 19991019
AB The 1 novel single **nucleotide** polymorphisms in the human

5-hydroxytryptamine (serotonin) **receptor** 1E (HTR1E) gene were discovered by characterizing the HTR1E gene found in genomic **DNAs** isolated from Index Repository that contains immortalized **cell** lines from one chimpanzee and 93 human individuals. Compns. and methods for detecting one or more of these polymorphisms are also disclosed. Allele-specific **oligonucleotides** for hybridization, amplification, or primer-extension are provided for genotyping or haplotyping the HTR1E gene. In addn., various genotypes and haplotypes for HTR1E gene that exist in the population are described.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 47 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:284135 HCAPLUS
DOCUMENT NUMBER: 134:306198
TITLE: Polymorphisms in the human 5-hydroxytryptamine (serotonin) **receptor** 1D (HTR1D) gene as drug targets
INVENTOR(S): Choi, Julie Y.; Denton, R. Rex; Nandabalan, Krishnan; Stephens, J. Claiborne
PATENT ASSIGNEE(S): Genaissance Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001027311	A2	20010419	WO 2000-US28115	20001012
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001013316	A5	20010423	AU 2001-13316	20001012

PRIORITY APPLN. INFO.: US 1999-159257P P 19991013
WO 2000-US28115 W 20001012

AB The 2 novel single **nucleotide** polymorphisms in the human 5-hydroxytryptamine (serotonin) **receptor** 1D (HTR1D) gene were discovered by characterizing the HTR1D gene found in genomic **DNAs** isolated from Index Repository that contains immortalized **cell** lines from one chimpanzee and 93 human individuals. Compns. and methods for detecting one or more of these polymorphisms are also disclosed. Allele-specific **oligonucleotides** for hybridization, amplification, or primer-extension are provided for genotyping or haplotyping the HTR1D gene. In addn., various genotypes and haplotypes for HTR1D gene that exist in the population are described.

L38 ANSWER 48 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:115166 HCAPLUS
DOCUMENT NUMBER: 134:158504

TITLE: Polymorphisms in the human 5-hydroxytryptamine **receptor** 1A gene as drug targets
INVENTOR(S): Denton, R. Rex; Kliem, Stefanie E.; Nandabalan, Krishnan; Stephens, Joel Claiborne
PATENT ASSIGNEE(S): Genaissance Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001010884	A1	20010215	WO 2000-US40519	20000801
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1208112	A1	20020529	EP 2000-962018	20000801
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003506070	T2	20030218	JP 2001-515692	20000801

PRIORITY APPLN. INFO.: US 1999-147711P P 19990806
WO 2000-US40519 W 20000801

AB The 3 novel single **nucleotide** polymorphisms in the human 5-hydroxytryptamine **receptor** 1A gene (HTR1A) were discovered by characterizing the HTR1A gene found in genomic **DNAs** isolated from Index Repository that contains immortalized **cell** lines from one chimpanzee and 93 human individuals. Compns. and methods for detecting one or more of these polymorphisms are also disclosed. Allele-specific **oligonucleotides** for hybridization, amplification, or primer-extension are provided for genotyping or haplotyping the HTR1A gene. In addn., various genotypes and haplotypes for HTR1A gene that exist in the population are described.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 49 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:900801 HCAPLUS
DOCUMENT NUMBER: 134:51926
TITLE: Cloning and expression of a human 5-HT4 **receptor** splice variant
INVENTOR(S): Bender, Eckhard; Pindon, Armelle Nathalie; Van Oers, Irma Petronella; Jurzak, Mirek; Luyten, Walter Herman Maria Louis
PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.
SOURCE: PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000077199	A1	20001221	WO 2000-EP5592	20000614
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1190057	A1	20020327	EP 2000-947854	20000614
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2003502040	T2	20030121	JP 2001-503643	20000614
NO 2001006093	A	20020128	NO 2001-6093	20011213
ZA 2001010273	A	20030313	ZA 2001-10273	20011213

PRIORITY APPLN. INFO.: GB 1999-13850 A 19990614
WO 2000-EP5592 W 20000614

AB There is disclosed an isolated or substantially pure form of a nucleic acid mol. encoding a new splice variant of human **5-HT receptor**, designated 5-HT4(h), which leads to the insertion of 14 amino acids into the second extracellular loop of the **receptor** protein. The isolated full-length cDNA was **transiently** expressed in mammalian **cells** in order to compare its pharmacol. with already known 5-HT4 splice variants, and its tissue distribution is analyzed by RT-PCR. The only tissue from which detectable levels of a PCR product corresponding to the 5-HT4(h) variant could be produced was the lower esophageal sphincter. Satn. expts. with the agonist [3H]**5-HT** as well as with the antagonist [3H]GR113808 indicated ligand concn. isotherms not significantly different from those of two other variants. Also provided by the invention are expression vectors incorporating said nucleic acid mol. in addn. to **transgenic cells**, tissues or organisms **transfected** with the nucleic acid mol.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 50 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:861798 HCAPLUS
DOCUMENT NUMBER: 134:14048
TITLE: **DNA** encoding human and rodent SNORF33 **receptors** and their diagnostic and therapeutic applications
INVENTOR(S): Borowsky, Beth E.; Ogozalek, Kristine L.; Jones, Kenneth A.
PATENT ASSIGNEE(S): Synaptic Pharmaceutical Corporation, USA
SOURCE: PCT Int. Appl., 281 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000073449	A1	20001207	WO 2000-US14654	20000526
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1100896	A1	20010523	EP 2000-936364	20000526
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 2003105318	A1	20030605	US 2002-267217	20021007
PRIORITY APPLN. INFO.:			US 1999-322257	A2 19990528
			US 1999-413433	A2 19991006
			WO 2000-US14654	W 20000526

AB This invention provides isolated cDNAs encoding human, rat, and mouse SNORF33 **receptors** and purified mammalian SNORF33 **receptors**. The SNORF33 **receptors** possess 42-48% amino acid identity to 5HT4, dopamine D2, and .beta.-adrenetrgic **receptors**. Quant. RT-PCR detected human SNORF33 mRNA in most tissues assayed, with highest levels i the kidney, stomach, fetal kidney, small intestine, and fetal lung; most nervous system structures showed little expression of SNORF33 mRNA as compared to peripheral organs, with the exception of the amygdala where mRNA levels are 19% of those detected in the kidney. The tissue showing the highest levels of rat SNORF33 mRNA is the testes., more than 10-fold higher than any other tissue. Human SNORF33 gene was placed on SHGC-1836 which maps to chromosome 6q21. The pharmacol. profile of rat SNORF33 using functional assays (cAMP release and oocyte Cl- currents) showed relative high affinity for tyramine, phenylethylamine, tryptamine, and kynuramine, and low affinity for other classical neurotransmitters. SNORF33 **receptor** may have a role in modulating sensory information, as suggested by the in situ hybridization expts., modulating nociceptive information, or modulating the integration of motor behavior and adaptive responses. The invention also provides vectors comprising nucleic acid encoding mammalian SNORF33 **receptors**, **cells** comprising such vectors, antibodies directed to mammalian SNORF33 **receptors**, and nucleic acid probes useful for detecting nucleic acid encoding mammalian SNORF33 **receptors**. Antisense **oligonucleotides** complementary to unique sequences of nucleic acid encoding mammalian SNORF33 **receptors**, **transgenic**, nonhuman animals which express **DNA** encoding normal or mutant mammalian SNORF33 **receptors**, methods of treating an abnormality that is linked to the activity of the mammalian SNORF33 **receptors**, as well as methods of detg. binding of compds. to mammalian SNORF33 **receptors**, methods of identifying agonists and antagonists of SNORF33 **receptors**, and agonists and antagonists so identified are also provided.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 51 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:861781 HCAPLUS
DOCUMENT NUMBER: 134:26785

TITLE: Measuring ion channel conductance of ion channel fusion proteins
INVENTOR(S): Groppi, Vincent E.; Wolfe, Mark L.; Berkenpas, Mitchell B.
PATENT ASSIGNEE(S): Pharmacia and Upjohn Company, USA
SOURCE: PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000073431	A2	20001207	WO 2000-US11862	20000525
WO 2000073431	A3	20010503		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1180142	A2	20020220	EP 2000-932007	20000525
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2003501022	T2	20030114	JP 2001-500744	20000525

PRIORITY APPLN. INFO.: US 1999-136174P P 19990527
WO 2000-US11862 W 20000525

AB The invention relates to novel methods for measuring ion channel **transmission** and methods and compns. useful in the indentification of ligand gated channel agonists and modulators. The compns. of suitable incubation media are described. A fusion protein of a nicotinic **receptor** and a 5-HT3 **receptor** is described. The nicotinic **receptor** is a calcium channel whereas the **5-HT receptor** is a sodium channel. This allows the **screening** for effectors of one channel with the other channel acting as a control using an appropriate incubation medium. The protein shows the pharmacol. expected of a nicotinic **receptor** when the corresponding gene was expressed in SHEP **cells**.

L38 ANSWER 52 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:814602 HCAPLUS
DOCUMENT NUMBER: 133:359784
TITLE: An erythroid **cell** expression system using **cells** that do not differentiate as hosts for expression of genes from a globin locus control region
INVENTOR(S): Suner, Marie-marthe; Windass, John David; Earley, Fergus Gerard Paul; Dunbar, Stuart John; Blythe, Judith Lesley
PATENT ASSIGNEE(S): Zeneca Ltd., UK
SOURCE: PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000068362	A2	20001116	WO 2000-GB1702	20000504
WO 2000068362	A3	20010315		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1183331	A2	20020306	EP 2000-929673	20000504
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002543780	T2	20021224	JP 2000-616330	20000504

PRIORITY APPLN. INFO.: GB 1999-10664 A 19990507
WO 2000-GB1702 W 20000504

AB The use of an erythroid **cell** which is substantially undifferentiated but capable of expressing a foreign gene from a globin locus control region is described. The **cells** remain undifferentiated and retain endogenous signalling cascades, esp. G protein-coupled **receptor** cascades allowing the study of the signal **transduction** mechanism using functional assays. The prodn. of suitable erythroid **cells** as well as **cells** useful in this way are also described and claimed. **Cells** that are differentiating can be readily identified by **screening** for differentiation markers, e.g. the accumulation of Hb or expression of reporter from a differentiation-dependent promoter. Expression of the gene for the tyramine **receptor** of Locusta migratoria in erythroid **cells** is demonstrated. The **cells** showed a tyramine-dependent calcium influx.

L38 ANSWER 53 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:772666 HCAPLUS
DOCUMENT NUMBER: 133:329558
TITLE: A novel serotonin-gated anion channel
INVENTOR(S): Ranganathan, Rajesh; Horvitz, H. R.; Cannon, Stephen C.
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, USA; The General Hospital Corporation
SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000064935	A1	20001102	WO 2000-US11266	20000427
WO 2000064935	C2	20020620		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,				

CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-131149P P 19990427

AB Disclosed is a novel serotonin-gated anion channel that is permeable to chloride ions. Also disclosed are methods for the **screening** of therapeutics useful for treating serotonin-mediated **cellular** responses and conditions, as well as diagnostic methods for identifying such conditions.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 54 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:565613 HCAPLUS

DOCUMENT NUMBER: 134:69702

TITLE: A family based association study of T102C polymorphism in 5HT2A and schizophrenia plus identification of new polymorphisms in the promoter

AUTHOR(S): Spurlock, G.; Heils, A.; Holmans, P.; Williams, J.; D'Souza, U. M.; Cardno, A.; Murphy, K. C.; Jones, L.; Buckland, P. R.; McGuffin, P.; Lesch, K. P.; Owen, M. J.

CORPORATE SOURCE: Division of Psychological Medicine, University of Wales College of Medicine, Cardiff, CF4 4XN, UK

SOURCE: Molecular Psychiatry (1998), 3(1), 42-49
CODEN: MOPSFQ; ISSN: 1359-4184

PUBLISHER: Stockton Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Several studies have shown an assocn. between schizophrenia and the C allele of a T-C polymorphism at **nucleotide** 102 of the 5HT2A **receptor** gene. In the present study the authors obsd. this assocn. in a sample of 63 parent/offspring trios where the proband received a diagnosis of DSM-III-R schizophrenia using TDT anal. (X2 = 6.26, X2 = 9.00, when one affected offspring was selected at random from each family, suggesting that the results are due to assocn. rather than linkage). There was no significant difference between the **transmission** of C102 from heterozygous fathers and mothers, which fails to support a role for genomic imprinting in this effect. T102C does not result in an alteration of the amino acid sequence of the protein. The authors therefore **screened** the promoter of 5HT2A for polymorphisms using single-strand confirmation polymorphism anal. An A-G polymorphism at -1438 that creates an HpaII restriction site was identified. This was in complete linkage disequil. with T102C and is hence a candidate for the pathogenic variant in schizophrenia. Functional anal. of A-1438G using luciferase assay demonstrated significant basal promoter activity in 5HT2A expressing HeLa **cells** by both the A and G variants. However, comparison of the A and G variants showed no significant differences in basal activity nor when promoter activity was induced by cAMP and protein kinase C-dependent mechanisms.

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 55 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:513795 HCAPLUS
DOCUMENT NUMBER: 133:130797
TITLE: Protein and cDNA sequence of human serotonin **receptor** gene homologs and uses thereof
INVENTOR(S): Mintz, Liat; Savitzky, Kinneret
PATENT ASSIGNEE(S): Compugen Ltd., Israel
SOURCE: PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000043506	A1	20000727	WO 2000-IL35	20000119
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1147183	A1	20011024	EP 2000-900795	20000119
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.: IL 1999-128131 A 19990119
WO 2000-IL35 W 20000119

AB The present invention provides protein and cDNA sequence of serotonin **receptor** gene homologs. The invention also provides expression vectors contg. **DNA** encoding serotonin **receptor**-like proteins (SRL) and host **cells transformed** with expression vectors for the recombinant prodn. of SRL. In one embodiment, the invention relates to assays for detecting SRL in biol. samples. Also disclosed are methods for utilizing SRL in drug **screening** assays and in therapy directed against diseases assocd. with inappropriate SRL activity or levels.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 56 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:278002 HCAPLUS
DOCUMENT NUMBER: 132:303475
TITLE: Peptide library-based methods and reagents for isolating biologically active peptides
INVENTOR(S): Gyuris, Jeno; Morris, Aaron J.
PATENT ASSIGNEE(S): Mitotix, Inc., USA
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000023465	A2	20000427	WO 1999-US24276	19991019
WO 2000023465	A3	20000831		
WO 2000023465	C2	20020822		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6420110	B1	20020716	US 1998-174943	19981019
CA 2346500	AA	20000427	CA 1999-2346500	19991019
EP 1123390	A2	20010816	EP 1999-956582	19991019
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002527098	T2	20020827	JP 2000-577191	19991019
AU 761648	B2	20030605	AU 2000-13164	19991019
US 2002172940	A1	20021121	US 2002-80854	20020222
PRIORITY APPLN. INFO.:			US 1998-174943 A	19981019
			WO 1999-US24276 W	19991019

AB One aspect of the invention is the synthesis of a binary method that combines variegated peptide display libraries, e.g., in a "display mode", with sol. secreted peptide libraries, e.g., in a "secretion mode", to yield a method for the efficient isolation of peptides having a desired biol. activity. The methodol. of the invention is useful for drug discovery.

L38 ANSWER 57 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:260535 HCAPLUS
DOCUMENT NUMBER: 132:290236
TITLE: Constitutively active human G protein-coupled **receptors** and their use in **screening** for **receptor** modulators
INVENTOR(S): Behan, Dominic P.; Chalmers, Derek T.; Liaw, Chen W.
PATENT ASSIGNEE(S): Arena Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 341 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 16
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000022129	A1	20000420	WO 1999-US23938	19991012
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,				

DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6555339	B1	20030429	US 1998-170496	19981013
CA 2342314	AA	20000420	CA 1999-2342314	19991012
AU 9964307	A1	20000501	AU 1999-64307	19991012
EP 1121431	A1	20010808	EP 1999-951991	19991012
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2003531565	T2	20031028	JP 2000-576019	19991012
US 2003023069	A1	20030130	US 2002-83168	20020226

PRIORITY APPLN. INFO.:

US 1998-170496	A2	19981013
US 1997-839449	B2	19970414
US 1998-60188	A2	19980414
US 1998-90783P	P	19980626
US 1998-95677P	P	19980807
WO 1999-US23938	W	19991012
US 2001-271913P	P	20010226

AB Disclosed herein are constitutively activated human G protein-coupled **receptors** (GPCRs) contg. the sequence P1 AA15 X (P1 = an amino acid residue within the **transmembrane** region 6; AA15 = the amino acids immediately following P1 which may be the same or different than the wild-type sequence; X = an amino acid within the intercellular region 3 which may be Lys, His, Arg, or Ala). In a most preferred embodiment, P1 = proline, AA15 is 15 endogenous amino acid residues following P1, and X = lysine. Also disclosed are nucleic acids encoding the mutant GPCRs, plasmids contg. the nucleic acids, and host **cells** contg. the plasmids. A algorithmic method for selecting which amino acid to alter to obtain a constitutively active GPCR is presented. Because it is most preferred that the human GPCRs which incorporate these mutations are incorporated into mammalian **cells** and utilized for the **screening** of agonists, partial agonists, and inverse agonists, the human GPCR incorporating the mutation need not be purified and isolated per se (i.e., these are incorporated within the **cellular** membrane of a mammalian **cell**), although such purified and isolated non-endogenous human GPCRs are well within the purview of this disclosure. A no. of orphan human G protein-coupled **receptors** modified according to the above scheme were produced. **Transmembrane** signaling by these mutant **receptors** was greater than that by the unmodified **receptor**.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 58 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:161445 HCAPLUS
DOCUMENT NUMBER: 132:204013
TITLE: Using mutated G protein-coupled **receptors** to improve their functional expression for drug **screening** in yeast
INVENTOR(S): Pausch, Mark Henry; Wess, Jurgen
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000012705	A2	20000309	WO 1999-US20013	19990901
WO 2000012705	A3	20001005		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2344591	AA	20000309	CA 1999-2344591	19990901
AU 9957011	A1	20000321	AU 1999-57011	19990901
AU 756244	B2	20030109		
EP 1123391	A2	20010816	EP 1999-944035	19990901
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002523091	T2	20020730	JP 2000-567692	19990901
PRIORITY APPLN. INFO.:			US 1998-98704P P	19980901
			WO 1999-US20013 W	19990901

AB Mutation of G protein-coupled **receptor** (GPCR) is used to improve their functional expression in yeast possibly by improving the efficiency of localization of the **receptor** or limiting interaction with desensitizing or antagonistic mechanisms. A rat M3 muscarinic acetyllcholine **receptor** deletion mutant (MAR IC3.DELTA., contg. only 22 amino acids proximal to both the 5th and 6th **transmembrane** helixes) has been correlated with improved functional expression in mammalian **cells** with retention of full ability to couple the heterotrimeric G protein, Gq(G.alpha.G.gamma.). This rat M3 MAR IC3.DELTA. is a functional GPCR showing a dose-dependent growth response to the agonist carbachol when it is expressed in yeast, while the wild type MAR is not. Mutants with similar IC3 deletion in Drosophila melanogaster MAR, rat cholecystokinin CCKB **receptor**, rat somatostatin **receptor** SSTR3 and human .alpha.2A adrenergic **receptor** show similar results, indicating modification of internal domain may be a generalized method to improve the function of heterologous GPCRs expressed in yeast. Deletion of a C-terminal domain of the rat neurotensin NT1 **receptor** and replacing Caenorhabditis elegans serotonin **receptor** Ce 5HTR IC3 with IC3.DELTA. of rat M3 MAR show functional expression and increased agonist sensitivity in yeast. This method is useful for high-throughput drug **screening** for therapeutic applications. G protein coupled **receptor** signal **transduction** yeast; muscarinic **receptor** signal **transduction** yeast G protein interaction; GPCR mammal G protein yeast interaction.

L38 ANSWER 59 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:144718 HCAPLUS
DOCUMENT NUMBER: 132:189678
TITLE: D-Arginine and analogs thereof for treatment of neurodegenerative diseases
INVENTOR(S): Canteros, Maria Griselda; Almeida, Osborne F. X.
PATENT ASSIGNEE(S): Max-Planck-Gesellschaft zur Forderung der Wissenschaften E.V., Germany
SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000010546	A2	20000302	WO 1999-EP6241	19990825
WO 2000010546	A3	20030417		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9958547	A1	20000314	AU 1999-58547	19990825

PRIORITY APPLN. INFO.: EP 1998-116035 A 19980825
WO 1999-EP6241 W 19990825

AB Described is generally the modulation of apoptotic **cell** death. In particular, pharmaceutical compns. comprising D-arginine or an analog thereof which are particularly useful for treating, preventing and/or delaying neuronal **cell** death are provided. Further, a method for treating, preventing and/or delaying neuronal **cell** death in a subject comprising administering to a subject D-arginine or an analog thereof, and the use of D-arginine or an analog thereof for the prepn. of pharmaceutical compns. for the treatment of neurodegenerative diseases, are described. In addn., food, feed, and supplements therefor comprising D-arginine or an analog thereof are provided. Furthermore, methods for identifying and obtaining neuroprotective drugs are provided.

L38 ANSWER 60 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:795994 HCAPLUS
DOCUMENT NUMBER: 132:31744
TITLE: Gene probes used for genetic profiling in healthcare **screening** and planning
INVENTOR(S): Roberts, Gareth Wyn
PATENT ASSIGNEE(S): Genostic Pharma Ltd., UK
SOURCE: PCT Int. Appl., 745 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9964627	A2	19991216	WO 1999-GB1780	19990604

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

GB 1998-12099	A	19980606
GB 1998-13291	A	19980620
GB 1998-13611	A	19980624
GB 1998-13835	A	19980627
GB 1998-14110	A	19980701
GB 1998-14580	A	19980707
GB 1998-15438	A	19980716
GB 1998-15574	A	19980718
GB 1998-15576	A	19980718
GB 1998-16085	A	19980724
GB 1998-16086	A	19980724
GB 1998-16921	A	19980805
GB 1998-17097	A	19980807
GB 1998-17200	A	19980808
GB 1998-17632	A	19980814
GB 1998-17943	A	19980819

AB There is considerable evidence that significant factor underlying the individual variability in response to disease, therapy and prognosis lies in a person's genetic make-up. There have been numerous examples relating that polymorphisms within a given gene can alter the functionality of the protein encoded by that gene thus leading to a variable physiol. response. In order to bring about the integration of genomics into medical practice and enable design and building of a technol. platform which will enable the everyday practice of mol. medicine a way must be invented for the **DNA** sequence data to be aligned with the identification of genes central to the induction, development, progression and outcome of disease or physiol. states of interest. According to the invention, the no. of genes and their configurations (mutations and polymorphisms) needed to be identified in order to provide crit. clin. information concerning individual prognosis is considerably less than the 100,000 thought to comprise the human genome. The identification of the identity of the core group of genes enables the invention of a design for genetic profiling technologies which comprises of the identification of the core group of genes and their sequence variants required to provide a broad base of clin. prognostic information - "genostics". The "Genostic" profiling of patients and persons will radically enhance the ability of clinicians, healthcare professionals and other parties to plan and manage healthcare provision and the targeting of appropriate healthcare resources to those deemed most in need. The use of this invention could also lead to a host of new applications for such profiling technologies, such as identification of persons with particular work or environment related risk, selection of applicants for employment, training or specific opportunities or for the enhancing of the planning and organization of health services, education services and social services.

L38 ANSWER 61 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:795993 HCAPLUS

DOCUMENT NUMBER: 132:31743

TITLE: Gene probes used for genetic profiling in healthcare **screening** and planning

INVENTOR(S): Roberts, Gareth Wyn

PATENT ASSIGNEE(S): Genostic Pharma Limited, UK

SOURCE: PCT Int. Appl., 149 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9964626	A2	19991216	WO 1999-GB1779	19990604
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2330929	AA	19991216	CA 1999-2330929	19990604
AU 9941586	A1	19991230	AU 1999-41586	19990604
AU 766544	B2	20031016		
AU 9941587	A1	19991230	AU 1999-41587	19990604
GB 2339200	A1	20000119	GB 1999-12914	19990604
GB 2339200	B2	20010912		
EP 1084273	A1	20010321	EP 1999-925207	19990604
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2003528564	T2	20030930	JP 2000-553616	19990604
US 2003198970	A1	20031023	US 2002-206568	20020729

PRIORITY APPLN. INFO.:

GB 1998-12098	A	19980606
GB 1998-28289	A	19981223
GB 1998-16086	A	19980724
GB 1998-16921	A	19980805
GB 1998-17097	A	19980807
GB 1998-17200	A	19980808
GB 1998-17632	A	19980814
GB 1998-17943	A	19980819
US 1999-325123	B1	19990603
WO 1999-GB1779	W	19990604

AB There is considerable evidence that significant factor underlying the individual variability in response to disease, therapy and prognosis lies in a person's genetic make-up. There have been numerous examples relating that polymorphisms within a given gene can alter the functionality of the protein encoded by that gene thus leading to a variable physiol. response. In order to bring about the integration of genomics into medical practice and enable design and building of a technol. platform which will enable the everyday practice of mol. medicine a way must be invented for the **DNA** sequence data to be aligned with the identification of genes central to the induction, development, progression and outcome of disease or physiol. states of interest. According to the invention, the no. of genes and their configurations (mutations and polymorphisms) needed to be identified in order to provide crit. clin. information concerning individual prognosis is considerably less than the 100,000 thought to comprise the human genome. The identification of the identity of the core group of genes enables the invention of a design for genetic profiling technologies.

L38 ANSWER 62 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:795941 HCAPLUS
DOCUMENT NUMBER: 132:32470
TITLE: Ustilago maydis as a host **cell** for the expression of genes for G-protein-coupled **receptors** and in **screening** for modulators of the **receptor**
INVENTOR(S): Kessmann, Helmut; Durrenberger, Franz
PATENT ASSIGNEE(S): Discovery Technologies Ltd., Switz.
SOURCE: PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9964567	A1	19991216	WO 1999-CH246	19990604
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2334215	AA	19991216	CA 1999-2334215	19990604
AU 9940281	A1	19991230	AU 1999-40281	19990604
EP 1084231	A1	20010321	EP 1999-923357	19990604
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE				
JP 2002517228	T2	20020618	JP 2000-553557	19990604

PRIORITY APPLN. INFO.: CH 1998-1226 A 19980605
WO 1999-CH246 W 19990604

AB Methods of using **transgenic cells**, specifically Ustilago maydis-derived **cell** lines, as an expression host to detect interactions between G protein-coupled **receptors** (GPCs) or GPC-**receptor**-controlled signal **transmission** systems and test substances (ligands, modulators), or for searching for substances which are capable of interacting with **receptors** or signal **transmission** systems of this type are described. The **transformed cells** have a GPC-**receptor** -controlled signal **transduction** path with pos. feedback and are **transformed** in such a way that they express a heterologous GPC-**receptor** gene. The **transformed cell** lines also contain a reporter gene, the expression of which can be detected using measuring techniques and which is controlled by a promoter. Said promoter can be induced by stimulating a GPC-**receptor**, and is endogenous. The reporter gene is endogenous or heterologous. If the reporter gene is an endogenous one essential for **cell** growth, the n **cell** growth can be rapidly monitored turbidimetrically.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 63 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:733824 HCAPLUS
DOCUMENT NUMBER: 131:347535

TITLE: Sequence and drug **screening** approach for compounds modulating activity of human serotonin **receptor** (5-ht4b)
INVENTOR(S): Bard, Jonathan A.; Branchek, Theresa; Weinshank, Richard L.
PATENT ASSIGNEE(S): Synaptic Pharmaceutical Corporation, USA
SOURCE: U.S., 43 pp., Cont.-in-part of U.S. Ser. No. 971,690, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5985585	A	19991116	US 1995-157185	19950615
WO 9409828	A1	19940511	WO 1993-US10553	19931029
W: AU, CA, FI, HU, JP, KR, NO, NZ, RU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6083749	A	20000704	US 1994-281526	19940727
US 6432655	B1	20020813	US 1999-332837	19990614
US 6300087	B1	20011009	US 1999-450797	19991129
US 6376243	B1	20020423	US 1999-450790	19991129
US 2003166066	A1	20030904	US 2002-118804	20020409

PRIORITY APPLN. INFO.:
US 1992-971690 B2 19921103
WO 1993-US10553 W 19931029
US 1994-281526 A2 19940727
US 1995-157185 A1 19950615
US 1999-332837 A1 19990614

AB The invention provides for processes for identifying chem. compds. which specifically bind to a human 5-HT4B having the amino acid sequence of SEQ ID NO: 2 in nonneuronal **cells**. This **receptor** was expressed in the brain and coronary artery and descending colon and ileum. Sequences for this **receptor** are also provided. The nonneuronal **cells** include COS-7 and CHO **cells** and LMTK- and NIH-3T3 **cells**. The second messenger response in the presence and absence of the chem. compd. is measured as an indication of **receptor** activation. In addn. this system provides a method for detg. the physiol. effects of expressing varying levels of a mammalian 5-ht4b **receptor**. In addn., methods for diagnosing a predisposition to a disorder are described using RFLP and hybridization. A pharmaceutical compn. comprising an amt. of a substance to alleviate the abnormalities resulting from overexpression of a human 5-ht4b **receptor** and a pharmaceutically acceptable carrier are described. A **transgenic** system is described expressing antisense **RNA** to inhibit the **translation** of this **receptor**.

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 64 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:613683 HCAPLUS
DOCUMENT NUMBER: 131:223519
TITLE: Upregulation of type III endothelial **cell** nitric oxide synthase by rho GTPase function inhibitors, and therapeutic use
INVENTOR(S): Liao, James K.

PATENT ASSIGNEE(S): Brigham & Women's Hospital, Inc., USA
SOURCE: PCT Int. Appl., 105 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9947153	A2	19990923	WO 1999-US6185	19990319
WO 9947153	A3	19991118		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6180597	B1	20010130	US 1998-132849	19980811
AU 9931075	A1	19991011	AU 1999-31075	19990319

PRIORITY APPLN. INFO.:

US 1998-78774P	P	19980319
US 1998-92618	A	19980605
US 1998-132849	A	19980811
WO 1999-US6185	W	19990319

AB A use for rho GTPase function inhibitors is provided. In the invention, rho GTPase function inhibitors are found to upregulate endothelial **cell** Nitric Oxide Synthase activity. As a result, rho GTPase function inhibitors are useful in treating or preventing conditions that result from the abnormally low expression and/or activity of endothelial **cell** Nitric Oxide Synthase. Such conditions include pulmonary hypertension, ischemic stroke, impotence, heart failure, hypoxia-induced conditions, insulin deficiency, progressive renal disease, gastric or esophageal motility syndrome, etc. Subjects thought to benefit mostly from such treatments include nonhyperlipidemics and nonhypercholesterolemics, but not necessarily exclude hyperlipidemics and hypercholesterolemics.

L38 ANSWER 65 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:788718 HCAPLUS
DOCUMENT NUMBER: 130:48335
TITLE: Recombinant expression vectors for expression of heterologous G protein-coupled **receptors** in yeast
INVENTOR(S): Pausch, Mark H.; Ozenberger, Bradley A.; Hadcock, John R.; Price, Laura A.; Kajkowski, Eileen M.; Kirsch, Donald R.; Chaleff, Deborah T.
PATENT ASSIGNEE(S): American Cyanamid Company, USA
SOURCE: U.S., 55 pp., Cont.-in-part of U.S. Ser. No. 195,729.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5846819	A	19981208	US 1995-472045	19950606
US 5691188	A	19971125	US 1994-195729	19940214
CA 2183166	AA	19950817	CA 1995-2183166	19950214

PRIORITY APPLN. INFO.: US 1994-195729 A2 19940214

AB The present invention is directed to vectors for expression in yeast of an heterologous **nucleotide** sequence which codes for a G protein-coupled **receptor**, for example, the somatostatin **receptor**. Said heterologous protein is phys. expressed in a host **cell** membrane in proper orientation for both stereoselective binding of ligands, as well as functional interaction with G proteins on the cytoplasmic side of the **cell** membrane. In some embodiments, a **nucleotide** sequence encoding a heterologous or chimeric G.alpha. protein is also expressed. The recombinant yeast expressing the heterologous **receptor** may be used to **screen** for agonists and antagonists of the **receptor**. Thus, rat G.alpha.s, G.alpha.i2 and chimeric yeast-mammalian G.alpha. were shown to effectively interact with yeast G.beta..gamma.. Addnl., human 5HT1a **serotonergic** and .beta.2-adrenergic **receptors**, rat somatostatin **receptors**, and Drosophila muscarinic acetylcholine **receptors** which were expressed in yeast displayed expected pharmacol. The rat somatostatin **receptor** was capable of **transmitting** a signal through the endogenous yeast G.alpha. and stimulating **cell** growth.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 66 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:414673 HCAPLUS
DOCUMENT NUMBER: 129:50541
TITLE: **DNA** encoding 5-HT4 serotonin **receptors** and uses thereof
INVENTOR(S): Gerald, Christophe; Hartig, Paul R.; Branchek, Theresa; Weinshank, Richard L.
PATENT ASSIGNEE(S): Synaptic Pharmaceutical Corporation, USA
SOURCE: U.S., 66 pp., Cont.-in-part of U.S. 5,472,866. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5766879	A	19980616	US 1995-446822	19950731
US 5472866	A	19951205	US 1992-996772	19921224
WO 9414957	A2	19940707	WO 1993-US12586	19931222
WO 9414957	A3	19940818		
W: AU, CA, FI, HU, JP, KR, NO, NZ, RU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6331401	B1	20011218	US 1998-328314	19980403
US 2002081661	A1	20020627	US 2001-989861	20011119

PRIORITY APPLN. INFO.: US 1992-996772 A2 19921224
WO 1993-US12586 W 19931222
US 1995-446822 A3 19950731
US 1998-328314 A1 19980403

AB This invention provides an isolated nucleic acid mol. encoding a mammalian 5-HT4 **receptor** and an isolated nucleic acid mol. encoding a human 5-HT4 **receptor**, an isolated protein which is a mammalian 5-HT4 **receptor**, an isolated protein which is a human 5-HT4 **receptor**, vectors comprising an isolated nucleic acid mol. encoding a mammalian 5-HT4 **receptor**, vectors comprising an isolated nucleic acid mol. encoding a human 5-HT4 **receptor**, mammalian **cells** comprising such vectors, antibodies directed to the 5-HT4 **receptor**, nucleic acid probes useful for detecting nucleic acid encoding a mammalian or human 5-HT4 **receptor**, antisense **oligonucleotides** complementary to any sequences of a nucleic acid mol. which encodes a mammalian or human 5-HT4 **receptor**, pharmaceutical compds. related to the human 5-HT4 **receptor**, and nonhuman **transgenic** animals which express **DNA** encoding a normal or a mutant mammalian or human 5-HT4 **receptor**. This invention further provides methods for detg. ligand binding, detecting expression, drug **screening**, and treatments for alleviating abnormalities assocd. with a human 5-HT4 **receptor**.

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 67 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:59116 HCAPLUS
DOCUMENT NUMBER: 128:110855
TITLE: High-throughput **screening** of pharmacologically active substances
INVENTOR(S): Czernilofsky, Armin Peter; Von Rueden, Thomas; Himmler, Adolf; Loeber, Gerhard; Metz, Thomas; Schnitzer, Renate; Spevak, Walter; Stratowa, Christian; Tontsch, Ulrike; Weyer-Czernilofsky, Ulrike; Wiche-Castanon, Maria Josefa
PATENT ASSIGNEE(S): Boehringer Ingelheim International G.m.b.H., Germany; Czernilofsky, Armin Peter; Von Rueden, Thomas; Himmler, Adolf; Loeber, Gerhard; Metz, Thomas; Schnitzer, Renate; Spevak, Walter; Stratowa, Christian; et al.
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9800713	A1	19980108	WO 1997-EP3329	19970625
W: CA, JP, MX, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 816848	A1	19980107	EP 1996-110459	19960628
R: DE				
CA 2258022	AA	19980108	CA 1997-2258022	19970625
EP 907885	A1	19990414	EP 1997-930400	19970625
EP 907885	B1	20030903		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2000515964	T2	20001128	JP 1998-503822	19970625

AT 249041 E 20030915 AT 1997-930400 19970625
PRIORITY APPLN. INFO.: EP 1996-110459 A 19960628
WO 1997-EP3329 W 19970625

AB In a method of comparative high-throughput **screening** of pharmacol. active substances, the substances are deposited on test **cells** that contain .gtoreq.1 biol. target mol., the **cells** having an identical biol. base compn. and differing in their target mols. Alternatively, the substances are deposited on **cells** having different biol. base compns. and identical target mols. The effect of the substance on the activity of the target mols. is measured using a detection system linked to the activation of the target mol., and is compared directly with the effect on other mols. The target mol. may be e.g. a **receptor**, an intracellular component of a signal-**transmitting** pathway (e.g. a protein kinase or adaptor mol.), a ligand-regulated **transcription** factor, an apoptosis-regulating proteinase, phosphatase, GTPase, or intracellular hormone **receptor**, in native or genetically modified form. The detection system preferably measures **cell** proliferation, apoptosis, or expression of reporter genes. Thus, murine FDC-P1 **cells** were **transfected** with retroviral vector pGD into which had been inserted the oncogenic form of the human cDNA for c-H-rasVal12, a marker protein and therapeutic target in many human tumors which is activated by posttranslational farnesylation. The IL-3-independent proliferation of the **transfected cells** was inhibited by the farnesyltransferase inhibitor, L 739,749. In a high-throughput assay, 1.5 .times. 104 **cells** in 100 .mu.L growth medium were placed in each well of a microtiter plate, and test substance in DMSO was added to a final concn. of 5 .mu.g/mL. Growth of the **cells** was monitored by photometry at 492 nm. Test substances which inhibited proliferation were further tested in serial dilns. in the same assay system to det. the IC50.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 68 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1997:686718 HCAPLUS
DOCUMENT NUMBER: 128:18762
TITLE: Cloning and expression of a human serotonin 5-HT4 **receptor** cDNA
AUTHOR(S): Van Den Wyngaert, Ilse; Gommeren, Walter; Verhasselt, Peter; Jurzak, Mirek; Leysen, Josee; Luyten, Walter; Bender, Eckhard
CORPORATE SOURCE: Departments of Experimental Molecular Biology, Janssen Research Foundation, Beerse, B-2340, Belg.
SOURCE: Journal of Neurochemistry (1997), 69(5), 1810-1819
CODEN: JONRA9; ISSN: 0022-3042
PUBLISHER: Lippincott-Raven
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Using a combination of library **screening** and nested PCR based on a partial human serotonin 5-HT4 **receptor** sequence, we have cloned the complete coding region for a human 5-HT4 **receptor**. The sequence shows extensive similarity to the published porcine 5-HT4A and rat 5-HT4L **receptor** cDNA; however, in comparison with the latter, we find an open reading frame corresponding to only 388 amino acids instead of 406 amino acids. This difference is due to a frame shift caused by an addnl. cytosine found in the human sequence after position

1,154. Moreover, we also found the same addnl. cytosine in the rat 5-HT4 sequence. We confirmed the occurrence of the sequence by examg. this part of the sequence in genomic **DNA** of 10 human volunteers and in rat genomic **DNA**. Based on a part of the genomic 5-HT4 **receptor** sequence that was identified in the cloning process, there seem to be at least two possible splice sites in the coding region of the gene. The human 5-HT4 **receptor, transiently** expressed in COS-7 **cells**, showed radioligand binding properties similar to 5-HT4 **receptors** in guinea pig striatal tissue. [3H]GR 113808 revealed KD values of 0.15.+-.0.01 nM for the human **receptor** and 0.3.+-.0.1 nM in the guinea pig tissue. Binding consts. were detd. for four investigated 5-HT4 antagonists and three agonists, and appropriate binding inhibition consts. were found in each case. Stimulation of **transfected** COS-7 **cells** with 5-HT4-specific agonists caused an increase in cAMP levels.

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 69 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1997:599236 HCAPLUS
DOCUMENT NUMBER: 127:244022
TITLE: Human serotoninergic 5-HT2 **receptor** cDNA sequence, recombinant expression, use for hallucinogen **screening**, and other uses
INVENTOR(S): Kao, Hung-Teh; Hartig, Paul R.; Branchek, Theresa
PATENT ASSIGNEE(S): Synaptic Pharmaceutical Corp., USA
SOURCE: U.S., 18 pp., Cont. of U. S. Ser. No. 232,325, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5661024	A	19970826	US 1994-347591	19941130
US 5885785	A	19990323	US 1996-613044	19960308
US 6383762	B1	20020507	US 1998-145864	19980902
US 2002098548	A1	20020725	US 2001-929313	20010814

PRIORITY APPLN. INFO.:
US 1989-429832 B1 19891031
US 1990-635402 B1 19901231
US 1992-999661 B1 19921229
US 1994-232325 B1 19940425
US 1994-347591 A3 19941130
US 1996-613044 A3 19960308
US 1998-145864 B1 19980902

AB The present invention provides an isolated nucleic acid mol. encoding an **5-HT receptor**, and an isolated protein which is a human **5-HT receptor**. The invention also provides vectors comprising **DNA** mols. encoding a human 5-HT2 **receptor**, and vectors adapted for expression of the 5-HT2 **receptor** in bacterial, yeast, or mammalian **cells**. In addn., the invention provides a **DNA** probe useful for detecting nucleic acid encoding the 5-HT2 **receptor**, a method for detg. whether a ligand which is not known to be capable of binding to the 5-HT2 **receptor** can bind to the 5-HT2 **receptor**, a method for

detecting the presence of 5-HT2 **receptor** on the surface of a **cell**, and a method of **screening** drugs to identify drugs which specifically interact with, and bind to, the 5-HT2 **receptor**. The invention herein also concerns an antibody directed to the human 5-HT2 **receptor**, such as a monoclonal antibody directed to an epitope of the 5-HT2 **receptor** present on the surface of a **cell** and having an amino acid sequence included within the amino acid sequence disclosed. Human 5-HT2 **receptors** expressed using plasmid pMO5-6B in mouse LTK **cells** were used to test a series of drugs for binding by the **receptors**.

L38 ANSWER 70 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1997:594839 HCAPLUS
DOCUMENT NUMBER: 127:257606
TITLE: Assessment of the responsiveness of individuals to modulators of the 5-HT2 **receptors**, especially the 5-HT2A **receptor**, by detection of **receptor** allele **DNA**
INVENTOR(S): Kerwin, Robert; Collier, David; Roberts, Gareth Wyn
PATENT ASSIGNEE(S): Smithkline Beecham PLC, UK; Kerwin, Robert; Collier, David; Roberts, Gareth Wyn
SOURCE: PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9732037	A1	19970904	WO 1997-EP993	19970226
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9718789	A1	19970916	AU 1997-18789	19970226
JP 2000506009	T2	20000523	JP 1997-530621	19970226
ZA 9701775	A	19971128	ZA 1997-1775	19970228

PRIORITY APPLN. INFO.: GB 1996-4465 A 19960301
WO 1997-EP993 W 19970226

AB A method is disclosed for use in assessing, in a subject suffering from a condition which may be treated with a 5-HT2 modulator, the likelihood whether the subject will be responsive or nonresponsive to treatment with a 5-HT2 modulator. The method comprises detecting the presence or absence of **DNA** encoding the Tyr452 and/or His452 alleles of the 5-HT2A gene in a biol. sample obtained from the subject. Genotyping for His452Tyr polymorphism was carried out using blood samples from individuals diagnosed as suffering from schizophrenia and being treated with clozapine. The individuals were also sep. assessed for responsiveness to clozapine treatment.

L38 ANSWER 71 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1997:411047 HCAPLUS

DOCUMENT NUMBER: 127:45508
TITLE: Gene encoding the human 5-hydroxytryptamine **receptor** 5-HT1F and its tissue-specific expression and other uses
INVENTOR(S): Weinshank, Richard L.; Branchek, Theresa; Hartig, Paul R.
PATENT ASSIGNEE(S): Synaptic Pharmaceutical Corporation, USA
SOURCE: U.S., 45 pp., Cont.-in-part of U.S. 5,360,735.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5639652	A	19970617	US 1994-117006	19940822
US 5360735	A	19941101	US 1992-817920	19920108
WO 9314201	A1	19930722	WO 1993-US149	19930108
W: AU, CA, FI, HU, JP, KR, NO, NZ, RU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6406859	B1	20020618	US 1999-246075	19990205
US 2003008823	A1	20030109	US 2002-166101	20020610

PRIORITY APPLN. INFO.:

US 1992-817920	A2	19920108
WO 1993-US149	W	19930108
US 1994-117006	A1	19940822
US 1995-483222	B1	19950607
US 1999-246075	A1	19990205

AB **DNA** encoding the human 5-HT1F **receptor** is cloned and characterized for use in prepn. of the **receptor** for pharmacol. uses and in diagnostics. The gene was cloned by first amplifying rat sequences flanked by sequences for the conserved **transmembrane** domains III and V. The resulting clones were then sequenced to confirm their identity as serotonin **receptors** and a genomic bank **screened** with this fragment. The resulting clone was expressed in Ltk- **cells** using the expression vector pcEXV-3 and the pharmacol. of the resulting protein studied. The pharmacol. properties indicated a 5-HT1 **receptor** but with enough differences to indicate a novel subclass. **Transcription** of the gene was limited to brain, uterus, and mesentery. The **transcript** was found in lamina V of the frontal cortex in large pyramidal **cells**
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L38 ANSWER 72 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1997:152427 HCAPLUS
DOCUMENT NUMBER: 126:234216
TITLE: Chromosomal localization of 15 ion channel genes
AUTHOR(S): Russell, Mark W. W.; du Manoir, Stan; Munroe, David J.; Collins, Francis S.; Brody, Lawrence C.
CORPORATE SOURCE: Dep. Pediatrics Communicable Diseases, Univ. Michigan, Ann Arbor, MI, USA
SOURCE: Somatic Cell and Molecular Genetics (1996), 22(5), 425-431
CODEN: SCMGDN; ISSN: 0740-7750
PUBLISHER: Plenum
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Several human Mendelian diseases, including the long-QT syndrome, malignant hyperthermia, and episodic ataxia/myokymia syndrome, have recently been demonstrated to be due to mutations in ion channel genes. Systematic mapping of ion channel genes may therefore reveal candidates for other heritable disorders. In this study, the GenBank and dbEST databases were used to identify members of several ion channel families (voltage-gated calcium and sodium, cardiac chloride, and all classes of potassium channels). Genes and ESTs without prior map localization were identified based on GDB and OWl database information and 15 genes and ESTs were selected for mapping. Of these 15, only the serotonin **receptor** 5HT3R had been previously mapped to a chromosome. A somatic **cell** hybrid panel (SCH) was **screened** with an STS from each gene and, if necessary, the results verified by a second SCH panel. For three ESTs, rodent derived PCR products of the same size as the human STS precluded SCH mapping. For these three, human AP1 clones were isolated and the genomic location was detd. by metaphase FISH. These genes and ESTs can now be further evaluated as candidate genes for inherited cardiac, neuromuscular, and psychiatric disorders mapped to these chromosomes. Furthermore, the ESTs developed in this study can be used to isolate genomic clones, enabling the detn. of each **transcript**'s genomic structure and phys. map location. This approach may also be applicable to other gene families and may aid in the identification of candidate genes for groups of related heritable disorders.

L38 ANSWER 73 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1996:462545 HCAPLUS
DOCUMENT NUMBER: 125:105068
TITLE: **Screening** of compounds based on a "window" of chemical messenger-independent activity of G protein-coupled **receptors**
INVENTOR(S): Dennis, Michael; Labrecque, Jean; Bouvier, Michel; Chidiac, Peter
PATENT ASSIGNEE(S): Can.
SOURCE: Can. Pat. Appl., 64 pp.
CODEN: CPXXEB
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2135253	AA	19960508	CA 1994-2135253	19941107

PRIORITY APPLN. INFO.: CA 1994-2135253 19941107

AB A method is presented for testing chem. compds. for their abilities to inhibit chem.-messenger-independent activity of G protein-coupled **receptors**, involving: expressing **DNA** encoding a G protein-coupled **receptor** in a **cell** expression system in such a manner as to generate a reproducible "window of chem.-messenger-independent activity" that allows for discrimination of chem. compds. based on relative ability to inhibit chem.-messenger-independent activity of said G protein-coupled **receptor**; measuring a quantifiable parameter using biochem. or other assay procedures that indicate the agonist-independent activity of said **receptor** in said system comprising whole **cells** or membrane fragments contg. G protein, an appropriate effector, and cloned G

protein-linked **receptor**; contacting a test-compd. with the system under conditions permitting interaction of the test-compd. with said **receptor**; and measuring the change, if any, of the quantifiable parameter which reflects the ability of the test compound to inhibit the chem.-messenger-independent activity of the G protein-coupled **receptor**. The utility of the system is shown by studies with .beta.-adrenergic and serotoninergic antagonists.

L38 ANSWER 74 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1996:458885 HCAPLUS
DOCUMENT NUMBER: 125:133472
TITLE: Molecular cloning and identification of a rabbit saphenous vein 5-HT1D.beta. **receptor** gene
AUTHOR(S): Wurch, Thierry; Cathala, Claudie; Palmier, Christiane; Valentin, Jean-Pierre; John, Gareth W.; Colpaert, Francis C.; Pauwels, Petrus J.
CORPORATE SOURCE: Centre de Recherche Pierre Fabre, Castres, 81106, Fr.
SOURCE: Neuroscience Research Communications (1996), 18(3), 155-162
CODEN: NRCOEE; ISSN: 0893-6609
PUBLISHER: Wiley
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The mol. identity of the serotonin (**5-HT**) **receptor** subtypes that mediate contraction in the rabbit isolated saphenous vein remains unclear. In order to identify a 5-HT1-like **receptor** subtype in this tissue, 3 sets of **oligonucleotide** primers were designed according to the human 5-HT1D.beta. **receptor** gene sequence for use in reverse **transcription**-polymerase chain reaction (RT-PCR). Amplification of specific PCR-products was obtained with rabbit saphenous vein total **RNA** reverse-**transcribed** into single-stranded cDNA. The PCR-amplified products were used to **screen** a rabbit genomic library. Sequencing of PCR-products and of a library clone revealed an open reading frame of 1173 base pairs. The deduced amino acid sequence is 91-93% homologous to the human 5-HT1D.beta., rat 5-HT1B, and mouse 5-HT1B **receptor** subtypes. A Thr-355 was found in **trans**-membrane domain VII as for the human 5-HT1D.beta. **receptor**. **Transient** expression of this rabbit saphenous vein gene in Cos-7 **cells** yielded the following **receptor** binding profile: 5-Carboxamidotryptamine > **5-HT** > Methiothepin > Naratriptan .gtoreq. Zolmitriptan > MK-462 .gtoreq. Sumatriptan > (+)-8-OH-DPAT > CP 93,129. This binding profile together with its amino acid sequence indicate that this rabbit gene encodes a 5-ht1D.beta. **receptor**.

L38 ANSWER 75 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:290075 HCAPLUS
DOCUMENT NUMBER: 122:97264
TITLE: Genes for serotonin **receptors** and uses of the genes and of the **receptors**
INVENTOR(S): Sutcliffe, J. Gregor; Erlander, Mark G.; Lovenberg, Timothy W.
PATENT ASSIGNEE(S): Scripps Research Institute, USA
SOURCE: PCT Int. Appl., 197 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9421670	A1	19940929	WO 1994-US2839	19940315
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5968817	A	19991019	US 1993-31538	19930315
AU 9465508	A1	19941011	AU 1994-65508	19940315
EP 689548	A1	19960103	EP 1994-913288	19940315
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				

PRIORITY APPLN. INFO.: US 1993-31538 19930315
WO 1994-US2839 19940315

AB Genes encoding a no. of human serotonin **receptors** are cloned and expressed for manuf. of the proteins to **screen** for biol. or pharmacol. active ligands of the **receptors**. Antibodies that are immunoreactive with the serotonin **receptors** are prepd. Polypeptide serotonin **receptor** antagonists, **oligonucleotide** probes for detecting **receptor** genes, and nonhuman **transgenic** animals expressing the human **receptor** genes are also described. Partial cDNAs from rat hypothalamus were obtained by PCR using primers derived from **transmembrane** domains with particular attention paid to domains V and VI, which include the serotonin-binding region and differentiate the **receptor** from other G protein-coupled **receptors**. These were then **screened** with probes from non-conserved regions of serotonin **receptors** to obtain clones. These clones were then used to obtain corresponding human **receptor** cDNAs. The clones were successfully expressed in animal **cell** lines and the gene products purified. All of the rat clones tested were expressed in various structures of the hypothalamus but not in the cerebellum, heart, liver, or kidney. Pharmacol. data for the **receptors** are presented.

L38 ANSWER 76 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1994:596874 HCAPLUS
DOCUMENT NUMBER: 121:196874
TITLE: Molecular cloning of cDNA for mammalian 5-HT4 serotonin **receptors** and uses thereof
INVENTOR(S): Gerald, Christophe; Hartig, Paul; Branchek, Theresa A.; Weinshank, Richard L.
PATENT ASSIGNEE(S): Synaptic Pharamceutical Corp., USA
SOURCE: PCT Int. Appl., 160 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9414957	A2	19940707	WO 1993-US12586	19931222
WO 9414957	A3	19940818		
W: AU, CA, FI, HU, JP, KR, NO, NZ, RU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5472866	A	19951205	US 1992-996772	19921224
CA 2129969	AA	19940707	CA 1993-2129969	19931222

AU 9459606	A1	19940719	AU 1994-59606	19931222
AU 685076	B2	19980115		
EP 642578	A1	19950315	EP 1994-905525	19931222
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
US 5766879	A	19980616	US 1995-446822	19950731
US 6331401	B1	20011218	US 1998-328314	19980403
US 2002081661	A1	20020627	US 2001-989861	20011119

PRIORITY APPLN. INFO.:
US 1992-996772 A 19921224
WO 1993-US12586 W 19931222
US 1995-446822 A3 19950731
US 1998-328314 A1 19980403

AB The cDNA for 5-HT4 **receptor** of rats and human are cloned and characterized and their uses described. Nucleic acid mol. encoding a mammalian **5-HT receptor**, vectors comprising an isolated nucleic acid mol. encoding a human **5-HT receptor**, mammalian **cells** comprising such vectors, antibodies directed to the **5-HT receptor**, nucleic acid probes useful for detecting nucleic acid encoding a mammalian or human **5-HT receptor**, antisense **oligonucleotides** complementary to any sequences of nucleic acid mol. which encodes a mammalian or human **5-HT receptor**, pharmaceutical compds. related to the human **5-HT receptor**, and non-human **transgenic** animals which express **DNA** encoding a normal or a mutant mammalian or human **5-HT receptor** are also claimed. This invention further provides methods for detg. ligand binding, detecting expression, drug **screening**, and treatments for alleviating abnormalities assocd. with a human 5-HT4 **receptors**.

L38 ANSWER 77 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:	1994:550191 HCAPLUS
DOCUMENT NUMBER:	121:150191
TITLE:	Isolation and characterization of the rat 5-hydroxytryptamine type 2 **receptor** promoter: constitutive and inducible activity in myometrial smooth muscle **cells**
AUTHOR(S):	Du, Yun Long; Wilcox, Brian D.; Teitler, Milt; Jeffrey, John J.
CORPORATE SOURCE:	Department Pharmacology and Toxicology, Albany Medical College, Albany, NY, 12208, USA
SOURCE:	Molecular Pharmacology (1994), 45(6), 1125-31 CODEN: MOPMA3; ISSN: 0026-895X
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB Previous studies from this lab. have demonstrated that the 5-hydroxytryptamine (5-HT2) **receptor** subtype is **transcriptionally** regulated by **5-HT** (serotonin) itself in rat myometrial smooth muscle **cells**. To better understand this **transcriptional** regulation, the authors have isolated and characterized the 5'-flanking region of the 5-HT2 **receptor** gene. **Screening** of a rat genomic library was accomplished using 5'-directed fragments of 5-HT2 cDNA, and a 5.2-kilobase fragment was isolated. Sequencing demonstrated that the fragment overlapped the 5'-end of the 5-HT2 cDNA by 226 base pairs. Primer extension and RNAse protection analyses indicated that 3 **transcriptional** start sites, which are common to both rat brain and myometrium, appear to exist and that the 5'-untranslated region of the

5-HT2 **receptor** cDNA is 1120 base pairs long. Neither classical TATA boxes nor CCAAT sequences were found upstream of any of the start sites identified. Upstream of the dominant start site, however, an initiator consensus sequence, two GC boxes (SP-1 binding sites), and several AP-2 binding sites were identified. Based on this information, a 1.4-kilobase fragment beginning 64 base pairs downstream from the dominant start site was constructed by polymerase chain reaction and ligand into a pCAT vector. **Transient transfection** of this construct into rat myometrial smooth muscle **cells** displayed both constitutive and serotonin-induced promoter activity. Serotonin-inducible activity was abolished by a selective 5-HT2 **receptor** antagonist; however, antagonists selective for other **5-HT receptor** subtypes were without affect. Conversely, a selective 5-HT2 **receptor** agonist completely substituted for serotonin as an inducer. Preliminary deletion expts. indicate that regulation of basal and serotonin-inducible activity likely depends upon different cis elements in the 5-HT2 **receptor** gene promoter.

L38 ANSWER 78 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1994:526145 HCAPLUS
DOCUMENT NUMBER: 121:126145
TITLE: A cDNA for a human 5-HT4B serotonin **receptor**
INVENTOR(S): Bard, Jonathan A.; Branchek, Theresa; Weinshank, Richard L.
PATENT ASSIGNEE(S): Synaptic Pharmaceutical Corp., USA
SOURCE: PCT Int. Appl., 113 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9409828	A1	19940511	WO 1993-US10553	19931029
W: AU, CA, FI, HU, JP, KR, NO, NZ, RU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2127117	AA	19940511	CA 1993-2127117	19931029
CA 2127117	C	20010213		
AU 9455909	A1	19940524	AU 1994-55909	19931029
AU 686580	B2	19980212		
EP 624100	A1	19941117	EP 1994-901252	19931029
EP 624100	B1	20000503		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
HU 72837	A2	19960528	HU 1995-1261	19931029
JP 08506240	T2	19960709	JP 1993-511402	19931029
AT 192490	E	20000515	AT 1994-901252	19931029
NO 9501689	A	19950621	NO 1995-1689	19950502
FI 9502094	A	19950629	FI 1995-2094	19950502
US 5985585	A	19991116	US 1995-157185	19950615
US 6432655	B1	20020813	US 1999-332837	19990614
US 6300087	B1	20011009	US 1999-450797	19991129
US 2003166066	A1	20030904	US 2002-118804	20020409

PRIORITY APPLN. INFO.:
US 1992-971690 A 19921103
WO 1993-US10553 W 19931029
US 1994-281526 A2 19940727
US 1995-157185 A1 19950615

US 1999-332837 A1 19990614

AB CDNAs for mammalian 5-HT4B **receptors** are cloned and the **receptors** characterized for use in the identification of ligands for use in the treatment of abnormalities assocd. with the **receptor**. The cloned cDNA is expressed in animal **cells** and antibodies and nucleic acid probes and antisense **oligonucleotides** for therapeutic or diagnostic use are described. Methods for detg. ligand binding, detecting expression, drug **screening**, and treatments for alleviating abnormalities assocd. with a human 5-HT4B **receptor** are described. The gene for the human **receptor** was cloned from a com. genomic bank in .lambda.DASHII by **screening** with probes derived from the **transmembrane** domains of the Drosophila serotonin **receptor** Dro5HTR and a cDNA cloned by PCR using primers derived from the genomic clone. The **receptor** mRNA was present at high levels in several areas of the brain and in some regions of the gastrointestinal tract, consistent with a possible role in smooth muscle relaxation. Expression of the cDNA in COS-7 **cells** resulted in the appearance of a serotonin **receptor** on the **cells** with the pharmacol. expected of the 5-HT4B **receptor**.

L38 ANSWER 79 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1994:474351 HCAPLUS
DOCUMENT NUMBER: 121:74351
TITLE: Characterization of human 5-HT1 **receptors** expressed in Sf9 insect **cells**
AUTHOR(S): Parker, Eric M.; Grisel, Darcy A.; Iben, Lawrence G.; Nowak, Henry P.; Mahle, Cathy D.; Yocca, Frank D.; Gaughan, Glen T.
CORPORATE SOURCE: Departments of Biophysics and Molecular Biology and, Wallingford, CT, 06492, USA
SOURCE: European Journal of Pharmacology, Molecular Pharmacology Section (1994), 268(1), 43-53
CODEN: EJPPET; ISSN: 0922-4106
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Four human **5-HT receptor** subtypes (5-HT1A, 5-HT1D.alpha., 5-HT1D.beta. and 5-HT1E) have been expressed in Sf9 insect **cells**. All four human 5-hydroxytryptamine **receptors** produced by Sf9 **cells** had the expected pharmacol. properties. Surprisingly, levels of expression of these **receptors** were relatively low (1-5 pmol/mg protein). High affinity agonist binding to the four 5-hydroxytryptamine **receptors** was reduced to different extents by guanine **nucleotides** and/or NaCl. This suggests that the nature of **receptor**-G protein coupling and/or the predominant conformational state of the **receptors** in Sf9 **cell** membranes varies among the different **receptors**. Activation of all four **receptors** inhibited forskolin-stimulated cAMP formation in intact Sf9 **cells**. Expression of 5-hydroxytryptamine **receptors** in Sf9 **cells** should be useful for purifn. of these **receptors**, for studies of post-**translational** modification and for pharmaceutical **screening**.

L38 ANSWER 80 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1994:237095 HCAPLUS
DOCUMENT NUMBER: 120:237095
TITLE: Serotonin **receptor** 5HT5a and the cloning and

expression of genes encoding it
INVENTOR(S): Amlaiky, Nourdine; Boschert, Ursula; Hen, Rene; Plassat, Jean-luc
PATENT ASSIGNEE(S): Institut National de la Sante et de la Recherche Medicale (INSERM), Fr.
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9401555	A1	19940120	WO 1993-FR650	19930629
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2693200	A1	19940107	FR 1992-8081	19920701
FR 2693200	B1	19940819		
EP 651801	A1	19950510	EP 1993-913199	19930629
EP 651801	B1	20031105		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
JP 07508654	T2	19950928	JP 1993-503005	19930629
US 5807691	A	19980915	US 1995-356405	19950329

PRIORITY APPLN. INFO.: FR 1992-8081 A 19920701
WO 1993-FR650 W 19930629

AB A novel serotonin **receptor** 5HT5a is identified and a cDNA encoding it is cloned from mouse brain and expressed in animal **cell** culture. A cDNA was cloned by **screening** a rat brain cDNA library with a probe derived from the conserved **transmembrane** domains III and IV of serotoninergic **receptors**. The coding region was cloned into the expression vector p513 and expressed in COS-7 **cells** where an LSD-binding protein appeared in the **cell** membrane fraction. LSD was displaced by other ligands with the efficacy in the order 2-bromo-LSD >ergotamine >5-CT >methylsergide = RU24969 >bufotenine >yohimbine = 8-OH-DPAT. In situ hybridization showed that the gene was expressed in the cerebral cortex, the hippocampus, and the granular bed of the olfactory bulb.

L38 ANSWER 81 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1994:209530 HCAPLUS
DOCUMENT NUMBER: 120:209530
TITLE: Serotonin **receptor** 5HT6 and cloning and expression of a cDNA encoding it
INVENTOR(S): Amlaiky, Nourdine; Boschert, Ursula; Hen, Rene; Plassat, Jean Luc; Ramboz, Sylvie
PATENT ASSIGNEE(S): Institut National de la Sante et de la Recherche Medicale (INSERM), Fr.
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 9401556	A1	19940120	WO 1993-FR651	19930629
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2693201	A1	19940107	FR 1992-8082	19920701
FR 2693201	B1	19940819		
EP 651802	A1	19950510	EP 1993-914777	19930629
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
JP 07508655	T2	19950928	JP 1993-503006	19930629
PRIORITY APPLN. INFO.:			FR 1992-8082	19920701
			WO 1993-FR651	19930629

AB A cDNA encoding the 5HT6 serotoninergic **receptor** activity of rat brain is cloned and expressed in animal **cells**. The cDNA was cloned from a rat brain bank in .lambda.UniZap by **screening** with a probe derived from the 5HT1B.beta. **receptor** gene. **Transient** expression of the cDNA in COS-7 **cells** resulted in the appearance of an activity that showed saturable binding of LSD (Kd=980 pM, Bmax=2.2 pmol/mg membrane protein), but did not bind cyanopindolol or 8-OH-DPAT. Bound LSD could be displaced by other ligands with the efficiency in the order methylsergide >bufotenine >sumatriptan >5HT. The corresponding human sequence was cloned from an MboI partial digest genomic bank in .lambda.GEM12 by **screening** with the cloned sequence.

L38 ANSWER 82 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1994:153884 HCAPLUS
DOCUMENT NUMBER: 120:153884
TITLE: Establishment of a **cellular** assay system for G protein-linked **receptors**: Coupling of human NK2 and 5-HT2 **receptors** to phospholipase C activates a luciferase reporter gene
AUTHOR(S): Weyer, U.; Schaefer, R.; Himmler, A.; Mayer, S. K.; Buerger, E.; Czernilofsky, A. P.; Stratowa, C.
CORPORATE SOURCE: Ernst Boehringer Inst., Bender and Co., Vienna, A-1121, Austria
SOURCE: Receptors and Channels (1993), 1(3), 193-200
CODEN: RCHAE4; ISSN: 1060-6823
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A functional **cellular** assay system was developed for the detection of substances modulating the activity of G protein-coupled **receptors**, linked to the phospholipase C second messenger system. The human adenocarcinoma **cell** line A549 was **transformed** with the Photinus pyralis luciferase gene under the control of the ICAM-1 gene 5'-regulatory region and, subsequently, stably **transfected** with the human neurokinin 2 (NK2) **receptor** gene. The ICAM-1 promoter is known to be inducible via the phospholipase C signal **transduction** pathway. In this NK2 **receptor** test **cell** line, expression of luciferase was inducible by neurokinin A and other NK2-specific agonists. The order of potency of the three neurokinins substance P, neurokinin A and neuromedin K was consistent with published data and results from ligand binding studies performed with the same NK2 test **cell** line. The agonistic effect of neurokinin A could be inhibited in a dose-dependent manner by simultaneous addn. of NK2-specific antagonists or protein kinase C-inhibitors. Similarly, a stable test **cell** line expressing the human serotonin 2 **receptor** was established. Agonist-induced luciferase expression

in this **cell** line was abolished in the presence of 5-HT2-specific antagonists. These **cellular** assay systems can be employed for the identification of competitive, non-competitive and allosteric modulators of the NK2 and the 5-HT2 **receptor**, and they present prototypes for analogous test **cell** lines for other phospholipase C-coupled **receptors**. '.

L38 ANSWER 83 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1993:574818 HCAPLUS
DOCUMENT NUMBER: 119:174818
TITLE: A cDNA encoding the human 5-hydroxytryptamine **receptor** 5-HT1F and its expression and other uses
INVENTOR(S): Weinshank, Richard L.; Branchek, Theresa; Hartig, Paul R.
PATENT ASSIGNEE(S): Synaptic Pharmaceutical Corp., USA
SOURCE: PCT Int. Appl., 118 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9314201	A1	19930722	WO 1993-US149	19930108
W: AU, CA, FI, HU, JP, KR, NO, NZ, RU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5360735	A	19941101	US 1992-817920	19920108
CA 2105284	AA	19930709	CA 1993-2105284	19930108
AU 9334389	A1	19930803	AU 1993-34389	19930108
AU 667510	B2	19960328		
EP 574579	A1	19931222	EP 1993-903021	19930108
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 06505879	T2	19940707	JP 1993-512587	19930108
US 5652113	A	19970729	US 1994-216594	19940322
US 5639652	A	19970617	US 1994-117006	19940822
AU 9656212	A1	19961024	AU 1996-56212	19960626
AU 703697	B2	19990401		
US 6406859	B1	20020618	US 1999-246075	19990205
US 2003008823	A1	20030109	US 2002-166101	20020610

PRIORITY APPLN. INFO.:
US 1992-817920 A2 19920108
WO 1993-US149 A 19930108
US 1994-117006 A1 19940822
US 1995-483222 B1 19950607
US 1999-246075 A1 19990205

AB **DNA** encoding the human 5-HT1F **receptor** is cloned and characterized for use in prepn. of the **receptor** for pharmacol. uses and in diagnostics. The cDNA was cloned by first amplifying rat sequences flanked by sequences for the conserved **transmembrane** domains III and V. The resulting clones were then sequenced to confirm their identity as serotonin **receptors** and a genomic bank **screened** with this fragment. The resulting clone was expressed in Ltk- **cells** using the expression vector pcEXV-3 and the pharmacol. of the resulting protein studied. The pharmacol. properties indicated a 5-HT1 **receptor** but with enough differences to indicate a novel subclass. **Transcription** of the gene was

limited to brain, uterus, and mesentery. The **transcript** was found in lamina V of the frontal cortex in large pyramidal **cells** .

L38 ANSWER 84 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1993:509175 HCAPLUS
DOCUMENT NUMBER: 119:109175
TITLE: New mouse 5-HT2-like **receptor**. Expression in brain, heart and intestine
AUTHOR(S): Loric, Sylvain; Launay, Jean Marie; Colas, Jean Francois; Maroteaux, Luc
CORPORATE SOURCE: Lab. Genet. Mol. Eucaryotes, CNRS, Strasbourg, 67085, Fr.
SOURCE: FEBS Letters (1992), 312(2-3), 203-7
CODEN: FEBLAL; ISSN: 0014-5793
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A novel member of the family of G protein-coupled **receptors** has been isolated from a mouse brain cDNA library by **screening** with polymerase chain reaction generated fragment of mouse genomic **DNA** amplified using degenerated primers. Sequence comparison demonstrates that the encoded protein sequence shows the highest homol. to the 5-HT2 family of **receptors**. The pharmacol. profile of membranes from COS **cells transfected** with this cDNA, corresponds to a new 5-HT2-like **receptor** called 5-HT2C. Its major sites of expression are in the mouse intestine and heart, also with detectable expression in brain and kidney. This **receptor** could account at least in part for the atypical functions attributed to the 5-HT1C/5-HT2 **receptors**.

L38 ANSWER 85 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1993:441161 HCAPLUS
DOCUMENT NUMBER: 119:41161
TITLE: Molecular cloning and functional expression of 5-HT1E-like rat and human 5-hydroxytryptamine **receptor** genes
AUTHOR(S): Lovenberg, Timothy W.; Erlander, Mark G.; Baron, Bruce M.; Racke, Margaret; Slone, Amy L.; Siegel, Barry W.; Craft, Cheryl M.; Burns, Jeffrey E.; Danielson, Patria E.; Sutcliffe, J. Gregor
CORPORATE SOURCE: Dep. Mol. Biol., Scripps Res. Inst., La Jolla, CA, 92037, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (1993), 90(6), 2184-8
CODEN: PNASA6; ISSN: 0027-8424
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Sequential polymerase chain reaction expts. were performed to amplify a unique sequence representing a guanine **nucleotide**-binding protein (G-protein)-coupled **receptor** from rat hypothalamic cDNA. Degenerate **oligonucleotides** corresponding to conserved amino acids from **transmembrane** domains III, V, and VI of known **receptors** [5-HT1A, 5-HT1C, and **5-HT**] were used as primers for the sequential reactions. The resulting product was subcloned and used to **screen** a rat genomic library to identify a full-length clone (MR77) contg. an intronless open reading frame encoding a 366-amino acid seven-**transmembrane** domain protein. The human

homolog was isolated, and its encoded protein had 93% overall amino acid identity with the rat sequence. Within the conserved **transmembrane** domains, the sequences exhibit approx. 52%, 59%, 65%, and 68% amino acid identity with the known rat 5-HT1A, rat 5-HT1B, rat 5-HT1D, and human 5-HT1E **receptors**, resp. MR77 was subcloned into eukaryotic expression vector system and expressed in CosM6 **cells**. Studies on broken **cell** prepns. indicate that the expressed **receptor** exhibits 125I-labeled LSD binding that can be displaced by serotonin but not by other biogenic amines. The specific binding is displaced by the selective 5-HT1D agonist sumatriptan but not by the mixed 5-HT1A/1D agonist 5-carboxyamidotryptamine. 125I-labeled LSD binding was competitively antagonized by the ergot alkaloids methysergide and ergotamine. HeLa **cells transfected** with the MR77 gene exhibited inhibition of adenylate cyclase in response to serotonin. MR77 is expressed at low levels throughout the brain, with the greatest expression in the cortex, hippocampus, and striatum. MR77 thus represents a **5-HT receptor** of the 5-HT1 class, and the authors propose that, on the basis of the pharmacol. characterization, MR77 represents an addnl. 5-HT1E-like **receptor**.

L38 ANSWER 86 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1993:116895 HCAPLUS
DOCUMENT NUMBER: 118:116895
TITLE: Primary structure and functional expression of the 5HT3 **receptor**, a serotonin-gated ion channel
AUTHOR(S): Marico, Andres V.; Peterson, Andrew S.; Brake, Anthony J.; Myers, Richard M.; Julius, David
CORPORATE SOURCE: Dep. Pharmacol., Univ. California, San Francisco, CA, 94143-0450, USA
SOURCE: Science (Washington, DC, United States) (1991), 254(5030), 432-7
CODEN: SCIEAS; ISSN: 0036-8075
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The neurotransmitter serotonin (**5-HT**) activates a variety of 2nd messenger signaling systems and through them indirectly regulates the function of ion channels. Serotonin also activates ion channels directly, suggesting that it may also mediate rapid, excitatory responses. A cDNA clone contg. the coding sequence of one of these rapidly responding channels, a 5-HT3 subtype of the serotonin **receptor**, has been isolated by **screening** a neuroblastoma expression library for functional expression of serotonin-gated currents in Xenopus oocytes. The predicted protein product has many of the features shared by other members of the ligand-gated ion channel family. The pharmacol. and electrophysiol. characteristics of the cloned **receptor** are largely consistent with the properties of native 5-HT3 **receptors**. The mRNA encoding this **receptor** is found in the brain, spinal cord, and heart. This **receptor** defines a new class of excitatory ligand-gated channels.

L38 ANSWER 87 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1992:167119 HCAPLUS
DOCUMENT NUMBER: 116:167119
TITLE: Mammalian genes and cDNAs for the serotoninergic **receptor** subtype 5-HT1D and their uses
INVENTOR(S): Weinshank, Richard L.; Branchek, Theresa; Harting, Paul R.

PATENT ASSIGNEE(S): Neurogenetic Corp., USA
SOURCE: PCT Int. Appl., 90 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9117174	A1	19911114	WO 1991-US3200	19910508
W: AU, CA, FI, HU, JP, KR, NO, SU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
US 5155218	A	19921013	US 1990-520716	19900508
CA 2082390	AA	19911109	CA 1991-2082390	19910508
CA 2082390	C	20020611		
AU 9178798	A1	19911127	AU 1991-78798	19910508
AU 657686	B2	19950323		
EP 530265	A1	19930310	EP 1991-909881	19910508
EP 530265	B1	19980916		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 06502297	T2	19940317	JP 1991-509856	19910508
JP 3319596	B2	20020903		
EP 787797	A1	19970806	EP 1996-118890	19910508
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 171211	E	19981015	AT 1991-909881	19910508
ES 2059298	T3	19990201	ES 1991-909881	19910508
JP 2002212103	A2	20020731	JP 2001-356183	19910508
NO 9204289	A	19921218	NO 1992-4289	19921106
US 5786157	A	19980728	US 1994-236686	19940502
US 5935925	A	19990810	US 1995-461812	19950605
US 6475746	B1	20021105	US 1999-371705	19990809
US 2002115149	A1	20020822	US 2001-5010	20011029

PRIORITY APPLN. INFO.:

US 1990-520716	A	19900508
EP 1991-909881	A3	19910508
JP 1991-509856	A3	19910508
WO 1991-US3200	A	19910508
US 1992-945116	B1	19920915
US 1993-946364	B1	19930108
US 1995-461812	A1	19950605
US 1999-371705	A1	19990809

AB Genes and cDNAs for 5-HT1D **receptors** of human and dog are cloned and expressed in animal **cell** culture. The cloned sequences are useful for the **screening** of possible antagonists and agonists (no data) and as anal. and diagnostic probes. The canine RDC4 gene was cloned by **screening** with amino acid sequence-derived **oligonucleotide** probes. The cloned sequences were used to probe com. human placental and hippocampal cDNA banks. Identity of the clones was confirmed by their pharmacol. upon expression in COS7 or Ltk- **cells** using the expression vector pSVL.

L38 ANSWER 88 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1990:584689 HCAPLUS
DOCUMENT NUMBER: 113:184689
TITLE: Non-neural **cell** cultures with human high affinity neurotransmitter uptake systems
INVENTOR(S): Lam, Dominic Man Kit

PATENT ASSIGNEE(S): Baylor College of Medicine, USA
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9006047	A2	19900614	WO 1989-US5358	19891121
W: AU, JP, KR				
RW: AT, BE, CH, DE, ES, FR, GB, IT, LU, NL, SE				
US 5188954	A	19930223	US 1988-274328	19881121
US 5225323	A	19930706	US 1989-342238	19890424
CA 1339694	A1	19980303	CA 1989-614407	19890929
AU 9053504	A1	19900626	AU 1990-53504	19891121
AU 637608	B2	19930603		
JP 04502255	T2	19920423	JP 1990-505426	19891121
JP 2902106	B2	19990607		
EP 502845	A1	19920916	EP 1990-905378	19891121
EP 502845	B1	19970806		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE				

PRIORITY APPLN. INFO.: US 1988-274328 19881121
US 1989-342238 19890424
WO 1989-US5358 19891121

AB **Transgenic** L-M **cell** lines expressing genes for human high-affinity neurotransmitter uptake systems for serotonin, dopamine and glycine, are established and characterized. These **cells** are useful in the characterization of these uptake systems and in the **screening** of agonists and antagonists. Human genomic **DNA** was introduced into L-M **cells** by cotransfection with the expression vector pSV2Neo. **Transformed cells** were **screened** for serotonin uptake and those showing high levels of activity were then **screened** for imipramine antagonism of uptake. Two lines, L-S1 and L-S2 were established. The uptake mechanism was shown to be Na-dependent and temp.-dependent. Studies with other antagonists showed the system to be specific for serotonin, with only imipramine and unlabeled serotonin inhibiting uptake. Kinetic anal. showed Michaelis-Menten kinetics and saturable binding of the **receptor**. Pharmacol. data did not clearly indicate the source tissue for the uptake systems.

L38 ANSWER 89 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1990:546308 HCAPLUS
DOCUMENT NUMBER: 113:146308
TITLE: Cloning, functional expression, and mRNA tissue distribution of the rat 5-hydroxytryptamine1A **receptor** gene
AUTHOR(S): Albert, Paul R.; Zhou, Qun Yong; Van Tol, Hubert H. M.; Bunzow, James R.; Civelli, Olivier
CORPORATE SOURCE: Vollum Inst. Adv. Biomed. Res., Oregon Health Sci. Univ., Portland, OR, 97201, USA
SOURCE: Journal of Biological Chemistry (1990), 265(10), 5825-32
CODEN: JBCHA3; ISSN: 0021-9258
DOCUMENT TYPE: Journal

LANGUAGE: English

AB G protein-coupled **receptors** comprise a family of genes that share significant sequence similarity. A rat genomic library was **screened** under low-stringency hybridization conditions with the coding portion of the hamster .beta.2-adrenergic **receptor** gene to isolate new members of this gene family. One of these clones, clone D, codes for a 5-hydroxytryptamine1A (5-HT1A) binding site since: 1) it possesses an intronless open reading frame encoding a protein with 7 putative **transmembrane** domains and 89% amino acid identity with the human 5-HT1A **receptor** (G21); 2) when **transfected** into Ltk- **cells**, it expresses a ligand-binding site with the pharmacol. of the 5-HT1A **receptor** subtype, including **5-HT**- and spiroxatrine-displaceable binding of 8-hydroxy-(2-(N,N-di[2,3-3H])propylamino)-1,2,3,4-tetrahydronaphthalene (KH = 0.8 nM). Further, clone D encodes a functional **receptor** because its binding site interacts with G proteins and because it mediates agonist-induced inhibition of basal and stimulated cAMP accumulation in **transfected** GH4C1 pituitary **cells**. The tissue distribution of 5-HT1A **receptor** mRNA was analyzed in rat brain; 5-HT1A mRNA is present with the expected distribution of the 5-HT1A **receptor** (highest in septum and hippocampus) but is present as 3 **RNA** species (3.9, 3.6, and 3.3 kb). These studies represent the first characterization of **receptor** function and brain distribution of the cloned rat 5HT1A **receptor**.

L38 ANSWER 90 OF 90 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1990:193222 HCAPLUS
DOCUMENT NUMBER: 112:193222
TITLE: Serotonin **receptor** 1c: cDNA cloning and characterization and expression in animal **cell** culture
INVENTOR(S): Axel, Richard; Jessell, Thomas M.
PATENT ASSIGNEE(S): Columbia University, USA
SOURCE: PCT Int. Appl., 84 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8908149	A1	19890908	WO 1989-US808	19890228
W: AU, DK, JP				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
US 4985352	A	19910115	US 1989-298639	19890118
AU 8933483	A1	19890922	AU 1989-33483	19890228
PRIORITY APPLN. INFO.:			US 1988-162654	19880229
			US 1989-298639	19890118
			WO 1989-US808	19890228

AB A cDNA clone for a functional serotonin **receptor** 1c is cloned and characterized and expressed in animal **cell** culture. The animal **cell** culture expression system developed is useful for **screening** serotonin agonists and agonists. The cDNA was cloned by **translation** of in vitro **transcripts** in Xenopus oocytes. Clones carrying a cDNA for a functional **receptor** produced enough activity to be detected by patch-clamp assay of serotonin dependent

membrane depolarization. The cDNA was introduced into a mammalian expression vector that was **transformed** into NIH3T **cells** . **Transformed cells** were responsive to serotonin i.e. showing serotonin-stimulated Ca2+ uptake. This was demonstrated by loading **cells** with the Ca-sensitive fluorescent dye indo-1 and fluorescence-activated **cell**-sorting. In the **transformed cell** line 95% of the **cells** were responsive.

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L2          7 SEA FILE=REGISTRY ABB=ON  PLU=ON  CACCGACCCCGACGAGGTGGCGCGACGCT
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L3          7 SEA FILE=REGISTRY ABB=ON  PLU=ON  CGCTGCGCTCTACCCAACCCCGGGCTTGC
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L4          7 SEA FILE=REGISTRY ABB=ON  PLU=ON  L1 OR L2 OR L3
L5          5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L4


=> d l5 ibib abs hitstr hitseq 1-5

L5   ANSWER 1 OF 5  HCAPLUS  COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:         2003:448590  HCAPLUS
                            Correction of: 2003:177122
DOCUMENT NUMBER:          139:31810
                            Correction of: 138:216594
TITLE:                    Differentially expressed nucleic acids and their
                          encoded proteins associated with pain and their use in
                          screening for regulatory agents
INVENTOR(S):              Woolf, Clifford; D'Urso, Donatella; Befort, Katia;
                          Costigan, Michael
PATENT ASSIGNEE(S):       The General Hospital Corporation, USA; Bayer AG
SOURCE:                   PCT Int. Appl., 1017 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   7
PATENT INFORMATION:

     PATENT NO.        KIND  DATE          APPLICATION NO.  DATE
     ---------------   ----  --------      ---------------  --------
     WO 2003016475      A2   20030227      WO 2002-XC25765  20020814
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
             UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
     WO 2003016475      A2   20030227      WO 2002-US25765  20020814
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
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UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-312147P P 20010814
US 2001-346382P P 20011101
US 2001-333347P P 20011126
WO 2002-US25765 A 20020814

AB The present invention relates to human and rat nucleic acid sequences which are related to pain and which are differentially expressed during pain. The nucleic acids are differentially expressed by at least .+-.1.4-fold in any or all of the following conditions using the Affymetrix human U95, murine U74 and rat U34 GeneChip arrays: axotomy, spared nerve injury, chronic construction, spinal segmental nerve lesion, and inflammatory pain models. The invention further relates to methods of identifying nucleic acid sequences which are differentially expressed during pain, microarrays comprising such differentially expressed sequences, and methods of screening agents for the ability to regulate the expression of such differentially expressed sequences. [This abstr. record is one of seven records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

IT **540840-88-8**
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(nucleotide sequence; differentially expressed nucleic acids and their encoded proteins assocd. with pain and their use in screening for regulatory agents)

RN 540840-88-8 HCAPLUS
CN DNA (rat clone WO03016475-SEQID-13871 pain-regulated protein cDNA plus flanks) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **540840-88-8**
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(nucleotide sequence; differentially expressed nucleic acids and their encoded proteins assocd. with pain and their use in screening for regulatory agents)

RN 540840-88-8 HCAPLUS
CN DNA (rat clone WO03016475-SEQID-13871 pain-regulated protein cDNA plus flanks) (9CI) (CA INDEX NAME)

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L5 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:177125 HCAPLUS
DOCUMENT NUMBER: 138:216597
TITLE: Differentially expressed nucleic acids and their encoded proteins associated with pain and their use in screening for regulatory agents
INVENTOR(S): Woolf, Clifford; D'Urso, Donatella; Befort, Katia; Costigan, Michael
PATENT ASSIGNEE(S): The General Hospital Corporation, USA; Bayer AG
SOURCE: PCT Int. Appl., 1017 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003016475	A2	20030227	WO 2002-XF25765	20020814

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,

CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

WO 2003016475 A2 20030227 WO 2002-US25765 20020814

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-312147P P 20010814
US 2001-346382P P 20011101
US 2001-333347P P 20011126
WO 2002-US25765 A 20020814

AB The present invention relates to human and rat nucleic acid sequences which are related to pain and which are differentially expressed during pain. The nucleic acids are differentially expressed by at least .+-.1.4-fold in any or all of the following conditions using the Affymetrix human U95, murine U74 and rat U34 GeneChip arrays: axotomy, spared nerve injury, chronic construction, spinal segmental nerve lesion, and inflammatory pain models. The invention further relates to methods of identifying nucleic acid sequences which are differentially expressed during pain, microarrays comprising such differentially expressed sequences, and methods of screening agents for the ability to regulate the expression of such differentially expressed sequences. [This abstr. record is one of seven records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

IT **392043-44-6**
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(nucleotide sequence; differentially expressed nucleic acids and their encoded proteins assocd. with pain and their use in screening for regulatory agents)

RN 392043-44-6 HCAPLUS

CN DNA (Rattus norvegicus cell line PC12 ETS domain transcription factor PET-1 cDNA) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **392043-44-6**
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(nucleotide sequence; differentially expressed nucleic acids and their encoded proteins assocd. with pain and their use in screening for regulatory agents)

RN 392043-44-6 HCAPLUS

CN DNA (Rattus norvegicus cell line PC12 ETS domain transcription factor PET-1 cDNA) (9CI) (CA INDEX NAME)

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L5 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:345973 HCAPLUS
DOCUMENT NUMBER: 136:363857
TITLE: Reagents and methods for the screening of compounds useful in the treatment of neurological diseases
INVENTOR(S): Deneris, Evan Samuel; Fyodorov, Dmitry Viktor; Hendricks, Timothy John
PATENT ASSIGNEE(S): USA
SOURCE: U.S., 35 pp., Cont.-in-part of U.S. Ser. No. 360,779.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 6384204	B1	20020507	US 1999-435335		19991105
US 6268216	B1	20010731	US 1999-360779		19990726
US 2003175830	A1	20030918	US 2001-27859		20011025
PRIORITY APPLN. INFO.:			US 1998-94264P	P	19980727
			US 1999-360779	A2	19990726
			US 1999-435335	A1	19991105

AB This invention relates to the gene sequence of a novel transcription factor specific for central 5-HT (serotonergic) neurons. The sequence and products are useful in screening methods for identifying and testing agonists and antagonists of serotoninergic activity.

IT **422346-46-1**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(nucleotide sequence; reagents and methods for screening of compds. useful in treatment of neurol. diseases)

RN 422346-46-1 HCAPLUS

CN DNA (Rattus norvegicus transcription factor Pet-1 cDNA plus flanks) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **422346-46-1**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(nucleotide sequence; reagents and methods for screening of compds. useful in treatment of neurol. diseases)

RN 422346-46-1 HCAPLUS

CN DNA (Rattus norvegicus transcription factor Pet-1 cDNA plus flanks) (9CI) (CA INDEX NAME)

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      1 tttgttttaa caaacatgtt tattagaaaa gtaaaaatat tgcataggtc
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1751 aa
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REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:560020 HCAPLUS
DOCUMENT NUMBER: 135:148253
TITLE: Pet-1, a novel rat ETS domain factor specific for central 5-HT (serotonergic) neurons
INVENTOR(S): Deneris, Evan Samuel; Fyodorov, Dmitry Viktor; Hendricks, Timothy John
PATENT ASSIGNEE(S): Case Western Reserve University, USA
SOURCE: U.S., 34 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6268216	B1	20010731	US 1999-360779	19990726
US 6384204	B1	20020507	US 1999-435335	19991105
US 2002090647	A1	20020711	US 2001-850799	20010508
US 2003175830	A1	20030918	US 2001-27859	20011025

PRIORITY APPLN. INFO.: US 1998-94264P P 19980727
US 1999-360779 A2 19990726
US 1999-435335 A1 19991105

AB This invention relates to the cDNA sequence of a novel transcription factor specific for central 5-HT (serotonergic) neurons, Pet-1, (PC12 ets factor) from rat. The sequence and products are useful in screening methods for identifying and testing agonists and antagonists of seronergic activity. Expression constructs and oligonucleotides are also provided. The authors report a cDNA clone prepd. from adrenal chromaffin-derived PC12 cell RNA that encodes a novel ETS-domain factor, Pet-1. The deduced primary structure of Pet-1 is composed of 340 amino acids and the encoded polypeptide has a predicted mol. mass of 35.4 kDa. The pattern of Pet-1 gene expression in the neonatal rat is highly restricted and suggests that Pet-1 functions primarily in the nervous system. Adrenal gland expresses the highest level of Pet-1 among the tissues examd. In situ hybridization indicates that Pet-1 is expressed in the adrenal medulla but not the adrenal cortex. Slightly weaker Pet-1 hybridization is detected in brain and low levels are detectable in intestine and eye. Pet-1 can bind specifically to a PEA3 ETS DNA-binding motif and can modulate transcription of synthetic promoter constructs in a sequence-specific manner. The authors recently identified a neural cell-type specific

enhancer, .beta.43', within the 3'-untranslated exon of the neuronal nicotinic acetylcholine receptor (nAchR) .beta.4 subunit gene. Similar to Pet-1, the .beta.4 gene is also expressed in PC12 cells. The presence of putative ETS-domain binding sites in the .beta.43' enhancer led the authors to hypothesize that members of the ets gene family activate neuronal nAchR genes. Cotransfection assays show that Pet-1 can activate reporter gene transcription in a .beta.43' enhancer-dependent and cell type-dependent manner. The results lead the authors to hypothesize that Pet-1 acts as a transcriptional regulator of downstream target genes involved in cholinergic neurotransmission.

IT **204438-78-8**
RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process); USES (Uses)
(nucleotide sequence; Pet-1, a novel rat ETS domain factor specific for central 5-HT (serotonergic) neurons)
RN 204438-78-8 HCAPLUS
CN DNA (Rattus norvegicus clone .lambda.73 transcription factor Pet-1 cDNA plus flanks) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **204438-78-8**
RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process); USES (Uses)
(nucleotide sequence; Pet-1, a novel rat ETS domain factor specific for central 5-HT (serotonergic) neurons)
RN 204438-78-8 HCAPLUS
CN DNA (Rattus norvegicus clone .lambda.73 transcription factor Pet-1 cDNA plus flanks) (9CI) (CA INDEX NAME)

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REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:113932 HCAPLUS
DOCUMENT NUMBER: 128:214040
TITLE: Pet-1, a novel ETS domain factor that can activate neuronal nAchR gene transcription
AUTHOR(S): Fyodorov, Dmitry; Nelson, Tom; Deneris, Evan
CORPORATE SOURCE: Dep. Neurosci., Sch. Med., Case Western Reserve Univ., Cleveland, OH, 44106, USA
SOURCE: Journal of Neurobiology (1998), 34(2), 151-163
CODEN: JNEUBZ; ISSN: 0022-3034
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The authors report a cDNA clone prepd. from adrenal chromaffin-derived PC12 cell RNA that encodes a novel ETS-domain factor, Pet-1. The deduced primary structure of Pet-1 is composed of 340 amino acids and the encoded polypeptide has a predicted mol. mass of 35.4 kDa. The pattern of Pet-1 gene expression in the neonatal rat is highly restricted and suggests that Pet-1 functions primarily in the nervous system. Adrenal gland expresses the highest level of Pet-1 among the tissues examd. In situ hybridization indicates that Pet-1 is expressed in the adrenal medulla but not the adrenal cortex. Slightly weaker Pet-1 hybridization is detected in brain and low levels are detectable in intestine and eye. Pet-1 can bind specifically to a PEA3 ETS DNA-binding motif and can modulate transcription of synthetic promoter constructs in a sequence-specific manner. The authors recently identified a neural cell-type specific enhancer, .beta.43', within the 3'-untranslated exon of the neuronal nicotinic acetylcholine receptor (nAchR) .beta.4 subunit gene. Similar to Pet-1, the .beta.4 gene is also expressed in PC12 cells. The presence of putative ETS-domain binding sites in the .beta.43' enhancer led the authors to hypothesize that members of the ets gene family activate neuronal nAchR genes. Cotransfection assays show that Pet-1 can activate reporter gene transcription in a .beta.43' enhancer-dependent and cell type-dependent manner. The results lead the authors to hypothesize that Pet-1 acts as a transcriptional regulator of downstream target genes involved in cholinergic neurotransmission.

IT **204438-78-8**
RL: PRP (Properties)
(nucleotide sequence; sequence of Pet-1, ETS domain factor that can activate neuronal nicotinic acetylcholine receptor gene transcription

in relation to neonatal tissue distribution and PEA3 element and .beta.43' enhancer)
RN 204438-78-8 HCAPLUS
CN DNA (Rattus norvegicus clone .lambda.73 transcription factor Pet-1 cDNA plus flanks) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **204438-78-8**
RL: PRP (Properties)
(nucleotide sequence; sequence of Pet-1, ETS domain factor that can activate neuronal nicotinic acetylcholine receptor gene transcription in relation to neonatal tissue distribution and PEA3 element and .beta.43' enhancer)
RN 204438-78-8 HCAPLUS
CN DNA (Rattus norvegicus clone .lambda.73 transcription factor Pet-1 cDNA plus flanks) (9CI) (CA INDEX NAME)

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REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT